

**LANE REGIONAL AIR PROTECTION AGENCY (LRAPA)
TITLE V OPERATING PERMIT**

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Issued in accordance with the provisions of
ORS 468A.040 and based on the land use compatibility findings included in the permit record.

ISSUED TO:

**International Paper Company
Springfield Mill**
P.O. Box 700
Springfield, Oregon 97477

INFORMATION RELIED UPON

Application Number: 61828
Received: 08/31/16

PLANT SITE LOCATION:

801 42nd Street
Springfield, Oregon 97478

LAND USE COMPATIBILITY STATEMENT:

From: City of Springfield
Dated: September 30, 1997

ISSUED BY LANE REGIONAL AIR PROTECTION AGENCY



Merlyn L. Hough, Director

October 4, 2016
Date

Nature of Business: Kraft Pulping and Containerboard Manufacturing
Primary SIC: 2631 -- Paperboard Mills
Secondary SIC: 4911 -- Electrical Power Generation

RESPONSIBLE OFFICIAL:

Title: Mill Manager

FACILITY CONTACT PERSON:

Name: Laura Seyler
Title: Air Quality Supervisor
Phone: (541) 741-5824

Addendum No. 3
Significant Permit Modification

In accordance with OAR 340-218-0150(1)(h) and 340-218-0180(1)(e), Title V Operating Permit No. 208850 is hereby amended to incorporate into the Title V Operating Permit the Construction ACDP issued July 8, 2016.

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LIST OF ABBREVIATIONS USED IN THIS PERMIT

ACDP	Air Contaminant Discharge Permit	DTV	Dissolving Tank Vent
ADMT	Air Dried Metric Tons	DV	Device
ADS	Air Density Separator	dv	Deciview
ADT	Air Dried Tons (same as AD short ton)	EAL	Emission Action Level
ADTP	Air Dried Tons of Pulp	ECTS	Effluent Collection & Treatment System
AIA	Aggregate Insignificant Activity	EF	Emission Factor
ASTM	American Society of Testing and Materials	EPA	US Environmental Protection Agency
BART	Best Available Retrofit Technology	ERC	Emission Reduction Credit
BACT	Best Available Control Technology	ESP	Electrostatic Precipitator
Batch	For the purposes of sulfur content of fuel oils, batch means one blend tank at the supplier's facility	EU	Emissions Unit
BDT	Bone Dry Tons	FCAA	Federal Clean Air Act
BDU	Bone Dry Units (equal to 2400 bone dry pounds)	FGR	Flue Gas Recirculation
BEEU	BART Eligible Emission Unit	ft ³	Cubic feet
BL	Black Liquor	GHG	Greenhouse Gases
BLS	Black Liquor Solids	gpm	Gallons Per Minute
C	Carbon	g/dscm	Gram per Dry Standard Cubic Meter
CaCO ₃	Lime, lime rock, calcium carbonate	gr/dscf	Grain per Dry Standard Cubic Foot
CAM	Compliance Assurance Monitoring	HAP	Hazardous Air Pollutant as defined by LRAPA Title 44
CaO	Calcium Oxide	Hi-D	High Density
CCA	Clean Condensate Alternative	Hr-opr	Hours of Operation
CCUP	Containerboard Capacity Utilization Project	H ₂ S	Hydrogen Sulfide
CEMS	Continuous Emissions Monitoring System	HVLC	High Volume Low Concentration
CFR	Code of Federal Regulations	ID	Identification
CMS	Continuous Monitoring System	I&M	Inspection and Maintenance
CO	Carbon Monoxide	Kg	Kilogram
CO ₂	Carbon Dioxide	lb	Pound
CO _{2e}	Carbon Dioxide Equivalent	Lo-D	Low Density
COMS	Continuous Opacity Monitoring System	LRAPA	Lane Regional Air Protection Agency
CSD	Condensate Steam Distillation	LVHC	Low Volume High Concentration
CSTOP	Condensate Stream Stripping Optimization Project	M	Thousand
daa	Daily Arithmetic Average for the 24-hour mill operating period beginning at 7:30 a.m. (local time) *	MACT	Maximum Achievable Control Technology
DCS	Dust Collection System	MB	Material Balance
DEQ	Oregon Department of Environmental Quality	MC	Moisture Content
Distillate Fuel Oil:	Any oil meeting the specifications of ASTM Grade 1 or Grade 2 fuel oils.	MDTP	Machine Dried Tons of Paper or Pulp
DNCG	Dilute Non-Condensable Gases	MeOH	Methanol
DP	Differential Pressure	MM	Million
dscf	Dry Standard Cubic Foot	MMBtu	Million British Thermal Units
dscfm	Dry Standard Cubic Feet per Minute	Mos	Months
		MR	Machine Room
		MSP	Monitoring System Performance
		NA	Not Applicable
		NAAQS	National Ambient Air Quality Standard
		NCASI	National Council of the Paper Industry for Air and Stream Improvement, Inc.
		NCG	Non-Condensable Gases
		NESHAP	National Emission Standards for Hazardous Air Pollutants
		NFL	New Fiber Line
		NG	Natural Gas

ng/J	Nanograms/Joule	RICE	Reciprocating Internal Combustion Engine
NN	Not Needed		
NON	Notice of Non-compliance	RMP	Risk Management Plan
NO _x	Nitrogen Oxides	SAM	Sulfuric Acid Mist
NSPS	New Source Performance Standards	scf	Standard Cubic Foot
NSR	New Source Review	scfm	Standard Cubic Feet per Minute
O ₂	Oxygen	SDT	Smelt Dissolving Tank
ODT	Oven Dried Tons	SERP	Source Emission Reduction Plan
OAR	Oregon Administrative Rules	SFO	Stipulated and Final Order
OCC	Old Corrugated Container	SIC	Standard Industrial Code
ORS	Oregon Revised Statutes	SIP	State Implementation Plan
O&M	Operation and Maintenance	SO ₂	Sulfur Dioxide
Pb	Lead	SSM	Start-up, Shutdown, and/or Malfunction
PCD	Pollution Control Device		
PM	Particulate Matter	ST	Source Test
PM ₁₀	Particulate Matter less than or = to 10 microns in size	SWT	Scale Weight Tons of paper
PM _{2.5}	Particulate Matter less than or = to 2.5 microns in size	TBD	To Be Determined
ppm	Part Per Million	TOPs	Topwood Optimization
PSD	Prevention of Significant Deterioration	TRS	Total Reduced Sulfur
PSEL	Plant Site Emission Limit	VCE	Vapor Compression Evaporator
QA	Quality Assurance	VE	Visible Emissions
QAP	Quality Assurance Plan	VOC	Volatile Organic Compound
QC	Quality control	WBL	Weak Black Liquor
RATA	Relative Accuracy Test Audit	WESP	Wet Electrostatic Precipitator
Reprocessed Oil:	Recycled waste oil or fuel oil which satisfies the specifications of ASTM D396 No.6 or OAR 340-111-0020(2)(c) and does not exceed the specifications of 40CFR279.11	#1 Oil	ASTM D 396 grade No. 1 fuel oil
Residual Oil:	ASTM D 396 grade No. 4 or No. 6 fuel oil	#2 Oil	ASTM D 396 grade No. 2 fuel oil
		#4 Oil	ASTM D 396 grade No. 4 fuel oil
		#6 Oil	ASTM D 396 grade No. 6 fuel oil
		ODP	Oven Dry Pulp

*** daa (daily arithmetic average) when used in context of periodic source testing, the daa calculation uses the most recent source test to calculate the daa.**

Modified EPA Method 9: As used in this permit “Modified EPA Method 9” is defined as follows:

Opacity must be measured in accordance with EPA Method 9. For all standards, the minimum observation period must be six minutes, though longer periods may be required by a specific rule or permit condition. Aggregate times (e.g., 3 minutes in any one hour) consist of the total duration of all readings during the observation period that are equal to or greater than the opacity percentage in the standard, whether or not the readings are consecutive. Each EPA Method 9 reading represents 15 seconds of time. [See also the definition of “Opacity” in LRAPA Title 12]

PERMITTED ACTIVITIES

1. Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air contaminants from those processes and activities directly related to or associated with air contaminant source(s) in accordance with the requirements, limitations, and conditions of this permit. [OAR 340-218-0010 and 340-218-0120(2)]
2. All conditions in this permit are federally enforceable, state enforceable and/or LRAPA enforceable except as noted below: [OAR 340-218-0060 and 340-218-0070]
 - 2.a. Conditions 13, 16 and 21 are currently enforceable by LRAPA only.
 - 2.b. Conditions 73, 74, 89, 94, 113, 114, 115, 116, 132, 139, 180, 81, 82, 96, 97, 124, 125, 136, and 141 are currently enforceable by LRAPA only but will become federally enforceable upon the EPA approval of proposed revisions to the Oregon State Implementation Plan (SIP) and the Oregon Plan for the Control of Designated Pollutants From Existing Facilities (Section 111(d) Plan).
 - 2.c. The total reduced sulfur PSEL in Condition 185 is currently enforceable only by LRAPA but will become federally enforceable upon the EPA approval of proposed revisions to the Oregon Plan for the Control of Designated Pollutants From Existing Facilities (Section 111(d) Plan).
 - 2.d. The three (3) attachments to this permit provide the following information:
 - 2.d.i. Attachment 1 is a table of the devices associated with each emission unit.
 - 2.d.ii. Attachment 2 is a discussion of the Subpart S NESHAP averaging period.
 - 2.d.iii. Attachment 3 contains the emission detail sheets and testing summary used to revise emission factors (EFs).

EMISSIONS UNIT (EU) AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION

3. The emissions units regulated by this permit are the following. A complete table with emission units and their associated devices are included in Attachment 1 to this permit. [OAR 340-218-0040(3)]:

Table 1. Emissions Unit and Pollution Control Device Identification

Emission Units		Control Device	
Description	EU ID	Description	PCD ID
Power Boiler	EU-150A	None	NA
Package Boiler	EU-150B	None	NA
Effluent Collection and Treatment System	EU-185	None	NA
Road Fugitives	EU-275A	None	NA
Other Sources of TRS (Original):	EU-275C	None	NA
Other Sources of TRS (Additional with Title V):	EU-275D	None	NA
Chip Handling and Screening:	EU-310	None	NA
Chip Storage	EU-320	None	NA
Fines System	EU-330	None	NA
New Fiber Line Pulping	EU-402	Combined Control Vent Lime Kilns	CD402-231
		Venturi scrubber	CD402-406
Batch Digesters	EU-410	None	NA
Kamyr Digester	EU-420	None	NA
Evaporation/Recovery Tanks & Steam System	EU-440	None	NA
No. 3 Recovery Furnace	EU-445A	#2 Oxidation Tower & N/S Blowers	CD440-067
		#1 Oxidation Tower & Blower	CD441-050
		#3 Recovery Wet Bottom ESP	CD445-183
No. 3 Recovery DTV East/West	EU-445B	#3 Recovery East and West DTV Joy Turbulaire Scrubbers	CD445-162,164
No. 4 Recovery Furnace	EU-445C	#4 Recovery Dry Bottom ESP	CD445-480
No. 4 Recovery DTV	EU-445D	#4 Recovery DTV Joy Turbulaire Scrubber	CD445-447

Emission Units		Control Device	
Description	EU ID	Description	PCD ID
Lime Kilns:	EU-455	Lime Kiln ESP	CD456-110
		Noncondensable Gas Collection & Thermal Oxidation	CD186-193
		#2 Lime Kiln NCG Thermal Oxidation	CD454-033
		#3 Lime Kiln NCG Thermal Oxidation	CD455-062
Recaust Systems	EU-456	None	NA
Paper Recycling Systems	EU-600	None	NA
No. 2 MR Wet End Systems	EU-715A	Baghouse	CD710-005
No. 2 MR Dry End Systems	EU-715B	Baghouse	CD730-105
Aggregate Insignificant Activities	EU-AIA	None	NA
Aggregate Insignificant Activities - TRS only	EU-AIATRS	None	NA

ALTERNATIVE OPERATING SCENARIOS

4. The permittee shall operate only under the following operating scenarios [OAR 340-218-0140(1)] within the limits and restrictions in the table below in addition to all other emission limits and standards in this permit. The permittee shall contemporaneously record changes from one alternative operating scenario to another. The record shall be made available or shall be submitted upon request by LRAPA. [OAR 340-218-0140(1)(c)]
 - I. Operating Scenario Base – Normal Mode of Operation. Demonstrate compliance with Pulp and Paper NESHAPs condensates applicable requirements in Conditions 30.f (7.2 lb/ODTP- methanol collected) and 32.a (6.6 lb/ODTP-methanol treated) by meeting the requirements in Condition 41 (CMS on liquid product methanol).
 - II. Operating Scenario Alternate Pulp and Paper NESHAPs Condensates Compliance Demonstration. Demonstrate compliance with Pulp and Paper NESHAPs condensates applicable requirements by meeting the requirements of 40 CFR 63.446(c)(2) (65% methanol collection alternative) and Condition 28.a (6.6 lb/odtp or 210ppm methanol treatment). AOS II permit conditions can be added using the appropriate permit modification process, if the permittee notifies LRAPA of their intent to use AOS II.

FACILITY-WIDE EMISSION LIMITS AND STANDARDS

The following tables contain summaries of applicable requirements other than the Plant Site Emission Limits (PSELs), along with the monitoring methods for the emissions units to which those requirements apply.

FACILITY-WIDE*

Table 2. Facility-wide Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
48-015-2	5	Fugitive Dust	Minimize Fugitives	I&M Recordkeeping	17	See Table 3
32-0651	6	ASTM Grade No. 4 and 6 Fuel Oil	1.75% sulfur	Recordkeeping	18	By Batch
32-065-2.A	7	Distillate Fuel Oil, ASTM Grade 1	0.3% sulfur	Recordkeeping	18	By Batch
32-065-2.B	8	Distillate Fuel Oil, ASTM Grade 2, Reprocessed Fuel Oil, Used Oil	0.5% sulfur	Recordkeeping	18	By Batch
OAR 340-111-020(2)(c) 40 CFR 279.11	9	Reprocessed Fuel Oil, Used Oil	Non-hazardous	Recordkeeping	19	By Batch
ACDP Condition 22; 51-015	11	SERP	Reduce Emissions	Recordkeeping	20	By Episode
49-010 & 32-090	12,13	Air contaminants	Not cause a Nuisance/ Injury	Recordkeeping	21	By Complaint
32-055	14	Particulate > 250 micron	No observable deposition off site	Recordkeeping	21	By Complaint
33-030 and 40 CFR 60.12	15	Concealment & Masking	Prohibited	Recordkeeping	21	By Complaint
40 CFR Part 68	10	Accidental Release	Prevention/ Emergency Response	Recordkeeping	22	By Release

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
36-020 and 36-040	16	Emergency Freeze Protection Plan	Provide Alternative Plan	Derive and Submit Alternative Plan After 1 Episode	16	NA
40 CFR Part 63, Subpart S	23-49	NESHAP	Reduce Emissions	Recordkeeping	23-49	As Required By Rule
40 CFT Part 63, Subpart MM	51-72	NESHAP	Reduce Emissions	Recordkeeping	51-72	As Required By Rule

* Facility production day and daily arithmetic averages (daa) based on 24-hour mill operating period beginning at 7:30 a.m. (local time).

5. No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne in accordance with LRAPA 48-015-2. [LRAPA 48-015-2]
6. The permittee shall not use any ASTM Grade No. 4 or No. 6 fuel oil containing more than 1.75 percent sulfur by weight. Sulfur content shall be measured using the test methods identified in Condition 18. [LRAPA 32-065-1] The permittee or permittee's fuel oil supplier may blend No. 4 fuel oil and/or used/reprocessed oil with the No. 6 fuel oil, provided that the blend continues to meet the ASTM definition of No. 6 fuel oil and the limit of 1.75 percent sulfur by weight.
7. The permittee shall not use any ASTM Grade 1 distillate fuel oil containing more than 0.3 percent sulfur by weight. Sulfur content shall be measured using the test methods identified in Condition 18. [LRAPA 32-065-2.A]
8. The permittee shall not use any ASTM Grade 2 distillate fuel oil, reprocessed fuel oil, oil blends, or used oil generated onsite containing more than 0.5 percent sulfur by weight. Sulfur content shall be measured using the test methods identified in Condition 18. [LRAPA 32-065-2.B]
9. The permittee shall not burn any reprocessed fuel oil or used oil, or oil blend, generated onsite or offsite, that does not meet the definition in OAR 340-111-020(2)(c) or that exceeds the allowable constituent levels in 40 CFR 279.11. Monitoring shall be performed in accordance with Condition 19. [LRAPA 32-009-4]
10. Should this stationary source, as defined in 40 CFR, Section 68.3, become subject to the accidental release prevention regulations in 40 CFR Part 68, the permittee shall notify LRAPA in advance of introducing the chemical to the facility, and shall submit a risk management plan (RMP) by the date on which a regulated substance is first present above a threshold quantity in a process as specified in Section 68.10. Once subject to 40 CFR 68, the permittee shall comply with the plan and all other applicable Part 68 requirements and certify compliance with the applicable requirements of Part 68 as part of the semi-annual compliance certification as required by 40 CFR Part 70. [40 CFR Part 68]
11. In the event an Air Pollution Alert, Warning, or Emergency Episode is declared in the Eugene/Springfield area by LRAPA, the permittee shall take the action appropriate to the episode condition as required by LRAPA 51-015 and contained in the Source Emission Reduction Plan (SERP) below. The permittee shall take such action when the permittee first becomes aware of such a declaration whether through news media, direct contact with LRAPA, or from other sources.

The permittee shall take the actions listed below when an air pollution episode is declared:

- 11.a. ALERT: Kilns & Recovery Furnaces: Monitor ESP control equipment for operation at full practical efficiency.
- Power Boiler & Package Boiler: Prepare to curtail combustion of fuel oil. Maximum utilization of midday (12 noon to 4 pm) atmospheric turbulence for boiler lancing and sootblowing.
- 11.b. WARNING: Kilns & Recovery Furnaces: Same for "ALERT".
- Power Boiler & Package Boiler: Reduce fuel oil consumption.
- 11.c. EMERGENCY: Kilns & Recovery Furnaces: If emission control equipment performance is adversely impacted by equipment malfunctions or maintenance activities, reduce operations to a level where control equipment performance is at full practical efficiency. If this is not practical, reduce source operations to a minimum practical level required for equipment and personnel protection.
- Power Boiler & Package Boiler: Cease burning fuel oil or reduce fuel oil firing to a minimum practical level required for equipment and personnel protection.

During an applicable Air Pollution Episode, the SERP shall be available on the source premises for inspection by LRAPA personnel. A record of all air pollution episodes and emission reduction actions shall be maintained in accordance with Condition 20. [LRAPA 51-015]

12. The permittee shall not discharge from any source whatsoever such quantities of air contaminants which cause injury or damage to any persons, the public, business or property; such determination to be made by LRAPA. [LRAPA 32-090]
13. The permittee shall not cause or allow air contaminants from any source subject to regulation by LRAPA to cause a nuisance. [LRAPA 49-010] Nuisance conditions will be verified by LRAPA. [This condition is LRAPA-only enforceable]
14. No person shall cause or permit the emission of any particulate matter which is greater than 250 microns in size if such particulate matter does or will deposit upon real property of another person when notified by LRAPA that the deposition exists and must be controlled. [LRAPA 32-055]
15. The permittee shall not willfully cause or permit the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminants emitted, conceals or masks an emission of an air contaminant which would otherwise violate these rules. [LRAPA 33-030 and 40 CFR 60.12]
16. Plant site emergency heating for freeze protection utilizing propane space heaters and the burning of Presto-logs in open barrels is allowed. Emergency heating utilizing kerosene or diesel salamander or "smudge pot" heaters is prohibited. LRAPA shall be notified immediately in accordance with Condition 195 when presto-logs are utilized to allow for an agency inspection if necessary. [36-020 and 36-040] [This condition is LRAPA-only enforceable]

MONITORING FOR FACILITY-WIDE EMISSION LIMITS AND STANDARDS

17. On the schedule contained in Condition 17.a, the permittee shall conduct a six (6) minute visible emission survey of each emission unit with devices with the potential to emit visible air contaminants to the atmosphere using EPA Method 22 for monitoring pertaining to Conditions 5 (reasonable precautions to prevent airborne particulate matter), 130, 131, 140, 146, 158 and 164. The visible emission surveys may be conducted simultaneously on multiple emission points when they are in the same field of view for the observer. The person conducting this survey does not have to be EPA Method 9 certified. However, the individual should be familiar with the procedures of EPA Method 9 including using the proper location to observe visible emissions. For purposes of this survey, excessive emissions observed using Method 22 are considered to be any visible emissions that leave the emission unit boundaries. The emission unit boundary

is defined as the general location on the permittees' property of the emission unit that includes the emitting device. [OAR 340-218-0050(3)(a)]

17.a. The permittee shall use the following monitoring schedule for conducting the visible emission surveys:

17.a.i. **Daily** for the following:

Table 3. Daily Visible Emission Monitoring Points

Emissions Unit	Monitoring Point
EU-150A, Power Boiler	Stack: On startup, in accordance with Condition 146, when burning liquid fuels

17.a.ii. **Weekly** for the following:

Table 4. Weekly Visible Emission Monitoring Points

Emissions Unit	Monitoring Point
EU-150A, Power Boiler	Stack: In accordance with Condition 146 when burning liquid fuels
EU-150B, Package Boiler	Stack: In accordance with Condition 158 when burning liquid fuels. (Data obtained in using the COMS in accordance with Condition 158 can be used to satisfy this monitoring requirement)

17.a.iii. **Monthly** (if operating more than 10% of the days in the month) for the following emissions units:

Table 5. Monthly Visible Emission Monitoring Points

Emissions Unit	Monitoring Point
EU 402, Device FU402-100	NFL Raw Material Handling System
EU 402, Device FU402-101	NFL Raw Material Conveying System
EU 402, Device PS402-401	NFL #2 Liquor Concentrator
EU-455, Devices PS455-999 Combined Kiln Stack	Stack: In accordance with Condition 130 <u>Note</u> : Not required if continuous opacity indicator is in operation.

Emissions Unit	Monitoring Point
EU-455, Devices GE454-029 and GE454-068 Reburn Elevators	At Each Individual Device: In accordance with Condition 131 <u>Note</u> : Not required if DCS is in operation.
EU-715B, Device FA715-122	No. 2 Machine, 1 st Dryer Section Hood Exhaust: <u>Note</u> : June – September only.
Petroleum Coke Storage and Handling Unit	Kiln petroleum coke silo, filters, piping, ductwork, connections and any other coke storage and handling equipment.

- 17.b. All visible emissions surveys shall be conducted during operating conditions that have the potential to create visible emissions (e.g., process is operating under normal, representative conditions).
- 17.c. If the daily surveys conducted during three (3) consecutive observation days do not detect visible emissions for more than 5% (18 seconds) of the survey time, the surveys need only be done once per week.
- 17.d. If the weekly surveys conducted during three (3) consecutive observation weeks do not detect visible emissions for more than 5% (18 seconds) of the survey time, the surveys need only be done once per month.
- 17.e. If the monthly surveys conducted during three (3) consecutive observation months do not detect visible emissions for more than 5% (18 seconds) of the survey time, the surveys need only be done once per quarter.
- 17.f. If visible emissions are detected at the emission unit boundary for more than 5% (18 seconds) of the survey time, the permittee shall:
 - 17.f.i. Take corrective action, which includes the following: for fugitive emissions from unit EU-402, the permittee shall use water, sweeping, a chemical treatment, or other effective method to minimize the fugitive emissions, unless cold weather would make this activity result in hazardous conditions. Cold weather is defined as weather conditions where ambient temperatures at surface level are expected to be or have been less than 32 degrees F within twelve (12) hours. If water is used to control the fugitive dust emissions, the permittee shall take care not to create a water quality problem from surface water run-off; or
 - 17.f.ii. Perform a Modified EPA Method 9 (see page 7 of the permit for the definition of ‘Modified EPA Method 9’) within 24 hours on the affected monitoring point. Each Modified Method 9 observation period shall be for a minimum of six (6) minutes unless any one (1) reading is greater than 20% opacity, in which case the observation period shall be for a minimum of 60 minutes or until a violation of the emissions standards identified in Conditions 140 or 165 is documented whichever is a shorter period.
- 17.g. The permittee shall record the corrective action taken or the results of the Modified EPA Method 9 tests.
- 17.h. The permittee may demonstrate compliance with Conditions 5, 140, and 165 notwithstanding visible emissions being detected for more than 5% (18 seconds) of the survey time, so long as it promptly performs a Modified EPA Method 9 pursuant to Condition 17.f.ii documenting that the opacity is less than 20%.
- 17.i. If visible emissions are detected for more than 5% (18 seconds) of the survey time, the survey and/or observation frequency for the affected monitoring point will start over with the initial frequency specified in Condition 17.

- 17.j. If the observer is unable to conduct the survey and/or Modified EPA Method 9 tests due to visual interferences caused by other visible emissions sources (e.g., fugitive emissions during high wind conditions) or due to weather conditions such as fog, heavy rain, or snow which impair visibility, the observer shall note such conditions on the data observation sheet and make at least three (3) attempts to conduct the surveys and/or tests at approximately 2-hour intervals throughout the day. If the visible emissions survey and/or test could not be conducted on the regularly scheduled day due to interferences, the observer shall conduct the test on the following day.
- 17.k. Prior notification and a pre-test plan are not required to be submitted to LRAPA for each visible emissions survey or Modified EPA Method 9 test.
- 18. The permittee shall monitor the sulfur content of each batch of oil used (ASTM Grade No. 6, ASTM Grade 1, ASTM Grade No. 4 or ASTM Grade 2) for monitoring pertaining to Conditions 6, 7, and 8 by: [OAR 340-218-0050(3)]
 - 18.a. Maintaining fuel receipts from the fuel supplier. The receipts shall certify that the oil contains no more than 0.3 weight percent sulfur for ASTM Grade 1 oil, 0.5 weight percent sulfur for ASTM Grade 2 oil and/or used oil as defined in 40 CFR 279.11 Subpart B, 1.75 weight percent sulfur ASTM Grade No. 6 oil for each batch; or
 - 18.b. Analyzing, or having analyzed by a contract laboratory, a monthly composite of representative samples taken by the permittee from each load or batch of fuel. Liquid fuels shall be analyzed using ASTM D129-64, D1552-83, or D4057-81 or equivalent.
- 19. The permittee shall monitor the quality of each batch of reprocessed fuel oil and/or used oil for monitoring pertaining to Condition 9 by doing one of the following: [OAR 340-218-0050(3)]
 - 19.a. Obtaining a certificate from the vendor for each batch of reprocessed fuel oil generated offsite; or
 - 19.b. Certifying by mill generation and collection procedures specified in the permittee's written manual for on-site used oil management that on-site generated used oil meets the definition of nonhazardous "specification used oil fuel" per 40 CFR 279.11; or
 - 19.c. Analyzing or having analyzed annually by a contract laboratory a composite of representative samples taken by the permittee for used oil generated onsite to demonstrate "specification used oil fuel" as per 40 CFR 279.11.
- 20. The permittee shall maintain records of air pollution episodes and emission reduction actions taken, recorded in a log for monitoring pertaining to Condition 11. [LRAPA 35-0160]
- 21. The permittee shall maintain a log recording all complaints received from the public, either written or via telephone or facsimile, by the responsible official or a designated appointee, that specifically refer to a complaint of odor or fugitive emissions or opacity from the permitted facility for monitoring pertaining to Conditions 12, 13, 14, and 15. The log shall also record permittee's actions to investigate, make an initial determination as to the validity of the complaint, and start efforts to begin to resolve the problem, (if a complaint is determined by the permittee to be valid), within two (2) working days of receiving the complaint. The permittee shall promptly notify LRAPA of any complaints unresolved after ten (10) days of receiving the complaint. The fact that the permittee has received a complaint shall not by itself be considered a violation of an emission standard in this permit. [LRAPA 35-0160 this condition is LRAPA-only enforceable]
- 22. A comprehensive Quality Assurance Plan (QAP) for all emissions monitoring, including CEMs and COMS, shall be maintained by the permittee. The QAP shall include all elements required to insure the integrity of all required emissions and ambient monitoring data. At least annually, LRAPA shall be notified of any changes to the QAP. A QAP shall also be written and maintained by the permittee for the Pulp and Paper NESHAPs Continuous Monitoring System (CMS) as referenced in Conditions 26.a and 53.a. The QAPs shall be available for inspection upon request by LRAPA. The permittee is not required to maintain more than one (1) master copy of the QAP. [OAR 340-218-0050]

SUBPART S NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FROM THE PULP AND PAPER INDUSTRY (PULP AND PAPER NESHAP)

23. The permittee is subject to the requirements of 40 CFR 63 Subpart S – National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. The requirements of 40 CFR 63 Subpart S are contained in the following conditions. Table 7 contains a summary of the requirements from 40 CFR 63 Subpart S and the permit conditions where these requirements are found. Table 9 contains a summary of the applicable requirements from 40 CFR 63 Subpart A.

Table 6. 40 CFR 63 Subpart S -- Pulp and Paper NESHAPs Conditions and Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
Various	24	Definitions	N/A	N/A	N/A	N/A
40 CFR 63.443	29	Kraft Pulping LVHC and HVLC HAPs	Capture and Control	I&M RecordKeeping	36, 42.i	Variable
40 CFR 63.446	30	Kraft Pulping Process Condensate HAPs	Capture and Control	I&M RecordKeeping	38, 43	Variable
40 CFR 63.446	30.c	Scenario I Named Condensate Streams	Capture and Control	I&M RecordKeeping	41--41.c, 43	Continuous
40 CFR 63.8(d)(2)	General, 43	Scenario I	CMS QA Plan	RecordKeeping	26.a	Annual Updates
40 CFR 63.446(e) and 40 CFR 63.453(n)	General	Stripper Parameters Triggering Action (Both Scenarios)	Operate within established parameter range	RecordKeeping and Testing	40, 43	Continuous requirement
40 CFR 63.446	31, 37	Closed Collection of Condensates	Capture and Control	I&M RecordKeeping	42	Variable
40 CFR 63.446(e)	32	Condensate Treatment Requirements (General)	Capture and Control	I&M RecordKeeping	43	Variable
40 CFR 63.446(g)	33, 33	Excess Emissions for Condensates	Capture and Control	I&M RecordKeeping	42, 43	Variable
40 CFR 63.447	35	Kraft Pulping HVLC HAPs	Clean Condensate Alternative	I&M RecordKeeping	35.k	Annual

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/ Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
40 CFR 63.450	36	Enclosures and Closed Vent Systems	I&M	I&M RecordKeeping	43	Variable
40 CFR 63.962 & 40 CFR 63.446(d)(1)	31, 37	Individual Drain Systems	I&M	I&M RecordKeeping	42	Variable

PULP AND PAPER NESHAP – DEFINITIONS AND GENERALLY APPLICABLE CONDITIONS

24. Pulp and Paper NESHAP Definitions

- 24.a. The terms used in the section(s) of this permit that are specifically intended to implement the NESHAP General Provisions, 40 CFR 63 Subpart A, shall have the meaning given them in 40 CFR 63.2, Definitions. [40 CFR 63.2]
- 24.b. The terms used in the conditions of this permit that are specifically intended to implement Subpart S -- National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry, 40 CFR 63.440 through 63.459, shall have the meaning given them in 40 CFR 63.441, Definitions. [40 CFR 63.441]
- 24.c. The terms used in the conditions of this permit that are specifically intended to implement Individual Drain System requirements, as specified in Subpart S -- National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry, shall have the meaning given them in 40 CFR 63.961, Definitions. [40 CFR 63.961]
- 24.d. *Affirmative defense* means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding. [40 CFR 63.441]
- 24.d.i. The affirmative defense for violation of emission standards during malfunction shall be in accordance with 40 CFR Subpart 63 Section 63.456 [40 CFR 63.456]
- 24.e. ‘*Continuous Monitoring System*’ (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation. [40 CFR 63.2]
- 24.f. ‘*HVLC Systems*’ HVLC affected systems are pulp washing systems, oxygen delignification systems, and specified decker, knotter, and screen systems. .
- 24.g. ‘*Malfunction*’ means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 63.2]
- 24.h. ‘*NCG Sources*’ for the LVHC system are as follows:
- 24.h.i. Combined foul condensate tank vents;
- 24.h.ii. Steam stripper column vacuum pump exhaust;

- 24.h.iii. 7 and 7a vacuum pump exhaust;
 - 24.h.iv. Batch digester secondary condenser;
 - 24.h.v. Batch decanter to DNCG system as of October 8, 2004;
 - 24.h.vi. Batch accumulator storage tank (BAST to DNCG system as of October 8, 2004);
 - 24.h.vii. WX tank to DNCG system as of October 8, 2004;
 - 24.h.viii. Kamyr Steaming Vessel Vent to DNCG system as of October 8, 2004, (provided the continuous digester NCGs continue to be periodically vented to the Kamyr steaming vessel). The Kamyr Steaming vessel is not required to be collected in the LVHC, if it uses only clean live steam and the digester is not periodically vented to the steaming vessel; but LRAPA must be notified in advance and approve any proposed changes to the Kamyr steaming vessel in writing.
- 24.i. *'Named Streams'* means the designated portions of affected systems specified in the NESHAPs from which the required emission reductions will be achieved. LVHC-affected systems are the digester systems, turpentine recovery systems (except for Condition 42.g.ii.A, cold storage), evaporation systems, steam stripper systems, or other systems serving one of the above functions. *'Named streams'* in LVHC systems are subject to a compliance date of April 16, 2001. HVLC affected systems are pulp washing systems, oxygen delignification systems, and specified decker, knotter, and screen systems.
- 24.j. *'Startup'* means the setting in operation of an affected source for any purpose. [40 CFR 63.2]
- 24.k. *'Shutdown'* means the cessation of operation of an affected source for any purpose. [40 CFR 63.2]
- 24.l. *'Total Process Operating Time'* in Condition 29.d (NCG LVHC system) means, in reference to excess emissions from the LVHC NCG, the sum of the periods of time that at least one (1) of the sources of NCGs to the LVHC NCG collection system is operating. The sources of NCGs are listed in Condition 24.h.
- 24.m. *'Process Operating Time'* is defined as follows as pertains to the steam stripper in Condition 33, process operating time is defined as all periods during which a named condensate stream is being produced. Total condensate treatment system operating time in Condition 33 as pertains to the steam stripper, is defined as all periods during which condensate streams are being collected in the stripper feed tanks, and/or the stripper is operating within the allowed parameter range. The sources of foul condensate are listed in Condition 30.c for Scenario I.
- 24.n. *'Steam Stripper System'* means a column (including associated stripper feed tanks, condensers, or heat exchangers) used to remove compounds from wastewater or condensates using steam. The steam stripper system also contains all equipment associated with a methanol rectification process, including rectifiers, condensers, decanters, storage tanks, and any other equipment serving the same function as those listed [40CFR63.441]. The permittee's processes that meet the definition shall include the VCE (vapor compression evaporator) and CSD (condensate steam distillation) of the VCE/CSD system provided that the VCE continues to provide a pre-stripping function for the foul condensate in conjunction with the CSD.
- 24.o. *'Digester System'* means each continuous digester or each batch digester used for the chemical treatment of wood or nonwood fibers. The digester system equipment includes associated flash tank(s), blow tanks(s), chip steamer(s) not using fresh steam, blow heat recovery accumulator(s), relief gas condenser(s), prehydrolysis unit(s) preceding the pulp washing system, and any other equipment serving the same function as those previously listed. The digester system includes any of the liquid streams or condensates associated with batch or continuous digester relief, blow, or flash steam processes. [40 CFR 63.441]
- 24.p. *'Turpentine Recovery System'* means all equipment associated with recovering turpentine from digester system gases including condensers, decanters, storage tanks, and any other equipment serving the same function as those previously listed. The turpentine recovery system includes any liquid streams associated with the turpentine recovery process such as turpentine decanter

underflow. Liquid streams that are intended for byproduct recovery are not considered turpentine recovery system condensate streams. [40 CFR 63.441]

- 24.q. *'Low Volume, High Concentration (LVHC) System'* means the collection of equipment including the digester, turpentine recovery, evaporator, steam stripper systems, and any other equipment serving the same function as those previously listed. [40 CFR 63.441]
25. **Monitoring and Reporting:** Conditions associated with applicable requirements that become effective at a date other than the issuance date of this permit/addendum (i.e., requirements that have a compliance date) are not in effect until the associated requirement(s) become effective, unless otherwise specified.

CMS REQUIREMENTS

26. **Applicable Requirement:** The following requirements apply to the CMSs required in Condition 38:
- 26.a. A CMS quality control program as required by 40 CFR 63.8(d)(2) must be developed by April 16, 2001. The CMS quality control procedures must be kept on record as required by 40 CFR 63.8(d)(3). [40 CFR 63.8(d)(2) and 63.8(d)(3)]
- 26.b. The permittee must keep the necessary parts for routine repairs of the affected CMS equipment readily available. [40 CFR 63.8(c)(1)(ii)]
27. **Monitoring Requirement:** The permittee must keep records pertaining to the CMSs required in Condition 38 as follows:
- 27.a. All CMS calibration checks; [40 CFR 63.10(b)(2)(x)]
- 27.b. All adjustments and maintenance performed on CMS; [40 CFR 63.10(b)(2)(xi)]
- 27.c. The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks; [40 CFR 63.10(c)(5)]
- 27.d. The nature of the repairs or adjustments to the CMS that was inoperative or out of control; [40 CFR 63.10(c)(12)] and
- 27.e. All procedures that are part of the quality control program required by Condition 26. [40 CFR 63.10(c)(14)]

REPORTING REQUIREMENTS FOR SUBPARTS A AND S

Semiannual Reporting

28. The permittee must submit semiannual Summary Reports and (if required) Excess Emissions and Continuous Monitoring System Performance Reports in accordance with the following: [40 CFR 63.10(e)(3)]
- 28.a. If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the Summary Report must be submitted, and the full Excess Emissions and Continuous Monitoring System Performance Report need not be submitted unless required by LRAPA. [40 CFR 63.10(e)(3)(vii)]
- 28.b. If the total duration of excess emissions of process or control system parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, or CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, then the Summary Report and the Excess Emissions and Continuous Monitoring System Performance Report must be submitted. [40 CFR 63.10(e)(3)(viii)]
- 28.c. The semiannual reports required by this condition must be submitted by the same dates as the annual and semiannual reports required in the permittee's Title V permit. The semi-annual reports must be submitted to LRAPA and the EPA Regional office as specified in the Title V permit. [40 CFR 63.9(a)(4)(ii) and 63.10(a)(5)]

Summary Report

- 28.d. The Summary Report must be entitled "Summary Report – Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance" and must contain the information specified below: [40 CFR 63.10(e)(3)(vi)]
- 28.d.i. The company name and address of the affected source; [40 CFR 63.10(e)(3)(vi) (A)]
- 28.d.ii. An identification of each hazardous air pollutant monitored at the affected source; [40 CFR 63.10(e)(3)(vi) (B)]
- 28.d.iii. The beginning and ending dates of the reporting period; [40 CFR 63.10(e)(3)(vi) (C)]
- 28.d.iv. A brief description of the process units; [40 CFR 63.10(e)(3)(vi) (D)]
- 28.d.v. The emission and operating parameter limitations specified in the relevant standard(s); [40 CFR 63.10(e)(3)(vi) (E)]
- 28.d.vi. The monitoring equipment manufacturer(s) and model number(s); [40 CFR 63.10(e)(3)(vi) (F)]
- 28.d.vii. The total operating time of the affected source during the reporting period; [40 CFR 63.10(e)(3)(vi) (H)]
- 28.d.viii. An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes; [40 CFR 63.10(e)(3)(vi)(I)]
- 28.d.ix. A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into

- periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes; [40 CFR 63.10(e)(3)(vi)(J)]
- 28.d.x. A description of any changes in CMS, processes, or controls since the last reporting period; [40 CFR 63.10(e)(3)(vi) (K)]
- 28.d.xi. The name, title, and signature of the responsible official who is certifying the accuracy of the report; [40 CFR 63.10(e)(3)(vi) (L)] and
- 28.d.xii. The date of the report. [40 CFR 63.10(e)(3)(vi) (M)]

Excess Emissions and Continuous Monitoring System Performance Report

- 28.e. Excess Emissions and Continuous Monitoring System Performance Report must include the following emissions information:
- 28.e.i. For excess emissions and parameter monitoring exceedances that occur during startups, shutdowns and malfunctions of the affected source, report the specific identification (i.e., date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances; [40 CFR 63.10 (c)(7)]
- 28.e.ii. For excess emissions and parameter monitoring exceedances that occur during periods other than startups, shutdowns and malfunctions of the affected source, report the specific identification (i.e., date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances; [40 CFR 63.10 (c)(8)]
- 28.e.iii. An emission data summary (or similar summary if the permittee monitors control system parameters), including: [40 CFR 63.10(e)(3)(vi) (I)]
- 28.e.iii.A. The total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases);
- 28.e.iii.B. The total duration of excess emissions expressed as a percent of the total source operating time during that reporting period; and
- 28.e.iii.C. A breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- 28.f. Excess Emissions and Continuous Monitoring System Performance Report must include the following information on CMS performance:
- 28.f.i. The date and time identifying each period in which the CMS was inoperative except for zero (low-level) and high-level checks; [40 CFR 63.10(c)(5)]
- 28.f.ii. The date and time identifying each period during which the CMS was out of control, as defined in 40 CFR 63.8(c)(7), and descriptions of corrective actions taken; [40 CFR 63.10(c)(6) and 63.8(c)(8)]
- 28.f.iii. A CMS performance summary (or similar summary if the permittee monitors control system parameters), including: [40 CFR 63.10(e)(3)(vi)(J)]
- 28.f.iii.A. The total CMS downtime during the reporting period (recorded in hours),
- 28.f.iii.B. The total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and
- 28.f.iii.C. A breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

PULP AND PAPER NESHP - KRAFT PULPING SYSTEM APPLICABLE REQUIREMENTS

29. Applicable Requirement: The permittee shall comply with the following requirements for the pulping system: [40 CFR 63.443]
- 29.a. The permittee shall control total HAP emissions from the following equipment systems, as specified in Conditions 29.b and 30.c. [40 CFR 63.440(d) and 40 CFR 63.443(a)]
 - 29.a.i. The permittee shall control the total HAP emissions from each LVHC system, as defined in 40 CFR 63.441, and in Condition 24.h of this permit.
 - 29.a.ii. The permittee shall control the total HAP emissions from each HVLC system, as defined in 40 CFR 63.441, satisfying the requirements of 63.443(a)(1)(ii) through (v), or by using the alternative HAP control options in Condition 35.
 - 29.a.iii. The specific equipment included in the LVHC system at this facility is listed in Condition 24.h of this permit.
 - 29.a.iv. The permittee shall comply with this condition and Condition 42 in accordance with the following compliance schedule:
 - 29.a.iv.A. Follow a final control strategy update, to the plan originally submitted in April 1999, for compliance with the pulping system control requirements for the processes specified in 40 CFR 63.443(a)(1)(ii) through (v).
 - 29.a.iv.B. The permittee shall maintain compliance with the pulping system control requirements for the processes specified in 40 CFR 63.443(a)(1)(ii) through (v). This requirement is satisfied by Condition 35 (CCA).
 - 29.a.iv.C. The final control strategy required by this condition (for brownstock washer vent collection or CCA) to incorporate the relevant requirements and monitoring conditions to ensure compliance with the pulping system control requirements for the process systems specified in 40 CFR 63.443(a)(1)(ii) through (v) or the alternative HAP control options in 40 CFR 63.447 shall be incorporated into this permit upon renewal. This requirement is satisfied by Condition 35 (CCA).
 - 29.b. Equipment systems listed in Condition 29.a shall be enclosed and vented into a closed-vent system and routed to a control device that meets requirements specified in Condition 30.c. The enclosures and closed-vent system shall meet the requirements specified in Condition 36. [40 CFR 63.443(c)]
 - 29.c. The permittee shall reduce total HAP emissions from each equipment system listed in Condition 29.a using a boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone. Use of the alternative control devices under 40 CFR 63.443(d) shall not be allowed without an approved Title V operating permit modification. [40 CFR 63.443(d)]
 - 29.d. Periods of excess emissions reported under Condition 28 shall not be a violation of Conditions 29.b and 30.c provided that the time of excess emissions divided by the total process operating time in a semi-annual reporting period does not exceed one percent for control devices used to reduce the total HAP emissions from the LVHC system. [40 CFR 63.443(e)]
 - 29.d.i. Excess emissions from the LVHC system shall be measured based on the monitoring of the following emission points:
 - 29.d.i.A. NCG System Emergency Auto-Vent Valve; and
 - 29.d.i.B. Batch Digester Manual Vent Valve.
 - 29.d.i.C. Beginning with collection of the Kamyr Steaming Vessel vents, WX tank, Batch decanter and Batch Accumulator Surge tank DNCG system

on October 8, 2004, under Condition 24.h the emergency vent for the DNCG system shall be included in the system(s) excess emission monitoring under Conditions 42 and 126.

- 29.d.ii. The percent of periods of excess emissions in a semi-annual reporting period will be calculated as follows:

[(Total Venting Time From the Vents Listed in Condition Error! Reference source not found.) (Venting Time Due to Start-Up, Shut-Downs and Malfunctions)] / (Total Process Operating Time)]

- 29.d.iii. Periods of time when the process is not in operation will not be considered “venting time”, even if the LVHC system vent valve is open to the atmosphere. Concurrent periods of time when multiple LVHC system vent valves are open will be counted as a single “venting time”.
- 29.d.iv. Typically closed emergency valves, e.g., PVR (pressure-vacuum-relief) on the batch blowheat system, hotwell water seals, or rupture discs, sample valves, drain valves, etc., shall not be included in the determination of excess emissions.
- 29.d.v. DNCG venting excess emission time shall be defined as when the emergency vent is open and the system develops enough positive pressure to vent actual emissions. All times when the emergency vent valve is open and the steaming vessel vents are open shall be reported.

PULP AND PAPER NESHAP -- PULPING SYSTEM CONDENSATES APPLICABLE REQUIREMENTS

30. Applicable Requirement: The permittee shall comply with the following requirements for the pulping system condensates: [40 CFR 63.446]
- 30.a. The condensate collection and treatment averaging time shall be no more than 60 days under Scenario I and shall be no-less-than 14 to no-more-than 60 days under Scenario II.
- 30.b. The pulping process condensates from the following equipment systems shall be collected and treated to meet the requirements specified in Conditions 30.c, 31, and 32: [40 CFR 63.446(b)]
- 30.b.i. Each digester system;
- 30.b.ii. Each turpentine recovery system;
- 30.b.iii. Each evaporator system condensate from:
- 30.b.iii.A. Vapors from each stage where weak liquor is introduced (feed stages); and
- 30.b.iii.B. Each evaporator vacuum system for each stage where weak liquor is introduced (feed stages).
- 30.b.iv. Each future HVLC collection system; and
- 30.b.v. Each LVHC collection system.

Mill-Specific Named Condensate Streams under Scenario I (7.2/6.6 lbs/ODTP collect/treat)

- 30.c. The permittee’s mill-specific ‘named streams’ under Operating Scenario I (identified in Condition 4) corresponding to the equipment systems listed in Conditions 30.b.i through 30.b.iv are listed in Conditions 30.c.i and 30.c.iii through 30.c.vi and Condition 30.d. The collection of any of these streams shall count towards the collection requirements in Condition 30.f. The permittee is not required to collect all of these streams provided the requirements of Condition 30.f (7.2 lb/ton) and Condition 32.a (6.6 lb/ton) are satisfied.
- 30.c.i. Condensates from each LVHC NCG collection system;
- 30.c.ii. Condensates from each future HVLC collection system;

- 30.c.iii. Condensates from each digester system including the Batch Digester accumulator condensate overflow collected at the Batch Accumulator Surge Tank;
- 30.c.iv. The condensates from each turpentine recovery system include the following mill streams:
 - 30.c.iv.A. Batch Digester turpentine decanter underflow;
 - 30.c.iv.B. Condensates from each future HVLC collection system;
 - 30.c.iv.C. Satellite turpentine and foul condensate collection systems from the NCG system;
- 30.c.v. The evaporator condensates from each stage where weak liquor is introduced (feed stages) including the following mill streams:
 - 30.c.v.A. Vapor Compression Evaporator (VCE) second stage foul condensate collected at the CSD reboiler;
 - 30.c.v.B. Reboiler Vent Condenser condensate;
 - 30.c.v.C. 6A/7A Evaporator 7A Heater condensate;
 - 30.c.v.D. 7A Surface Condenser foul side condensate;
 - 30.c.v.E. No. 4 Evaporator Surface Condenser foul side condensate; and 7A Surface Condenser foul side condensate;
 - 30.c.v.F. No. 4 Evaporator 7th Effect Heater condensate
- 30.c.vi. The evaporator condensates from each vacuum system where weak liquor is introduced including the following mill streams:
 - 30.c.vi.A. Condensate from the NCG Pre-scrubber.
- 30.d. The portion of the condensate from the Condition 30.c.v above-named streams that is not collected due to the permittee's process of stages condensate segregation, i.e. clean-side condensate not collected, or for other reasons, are the following streams. The permittee may also collect these streams to comply with the requirements of Condition 30.f (7.2 lb/ton) and Condition 32.a (6.6 lb/ton); but it is not required that these streams be collected provided that the requirements of those conditions are already satisfied.
 - 30.d.i. VCE First Stage Clean condensate;
 - 30.d.ii. 7A Surface Condenser Clean condensate; and
 - 30.d.iii. No. 4 Evaporator 7-Surface Condenser Clean condensate.
- 30.e. Modifications to the list of mill specific applicable condensate streams in Condition 30.c shall be done in accordance with 40 CFR 70.7 if the evaporators or other equipment are modified in a manner that changes the applicable stream list. The list shall continue to meet the requirements of Condition 30.c, if it is modified.

Condensate Collection Requirements -- General

- 30.f. The pulping process condensates from equipment systems listed in Conditions 30.b.i through 30.b.v that in total contain a total HAP mass of 3.6 kilograms or more of total HAP per megagram (7.2 pounds per ton) of ODP generated, produced, or associated with the equipment systems listed in Conditions 30.c shall be subject to the requirements of Conditions 31 and 32. [40 CFR 63.446(c)]
- 30.g. The permittee shall use the monitoring methods in Condition 38 to demonstrate compliance with Condition 30.c. The permittee shall use the monitoring requirements under Condition 41.

Closed Collection of Process Condensates

31. The pulping process condensates from the equipment systems listed in Conditions 30.c shall be conveyed in a closed collection system that is designed and operated to meet the following requirements: [40 CFR 63.446(d)]
- 31.a. Each closed collection system shall meet the individual drain system requirements specified in Condition 37, except for closed vent systems and control devices which shall be designed and operated in accordance with Conditions 36 (closed vent systems) and 30.c (control devices).
 - 31.b. If a condensate tank is used in the closed collection system, the tank shall meet the following requirements:
 - 31.b.i. The fixed roof and all openings (e.g., access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million above background, and vented into a closed-vent system that meets the requirements in Condition 36 and routed to a control device that meets the requirements in Condition 30.c; and
 - 31.b.ii. Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAP removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

Condensate Treatment Requirements

32. Each pulping process condensate from the equipment systems listed in Condition 30.c shall be treated according to the following mill selected option: [40 CFR 63.446(e)]
- 32.a. Treat the pulping process condensates to remove 3.3 kilograms or more of total HAP per megagram (6.6 pounds per ton) of ODP, or achieve a total HAP concentration of 210 parts per million or less weight at the outlet of the control device.
 - 32.b. The permittee shall use the monitoring methods in Condition 38 to demonstrate compliance with Condition 32.
 - 32.c. Each HAP removed from a pulping process condensate stream during treatment and handling under Conditions 31 and 32 shall be controlled as specified in Conditions 29.b (closed-vent system) and 30.c (thermally oxidize in Kilns or Recovery). [40 CFR 63.446(f)]

Excess Emissions: Regulated Condensates

33. For each steam stripper system used to comply with the requirements specified in Condition 32.a, periods of excess emissions reported under Condition 28 shall not be a violation of Conditions 30 and 32 provided that the time of excess emissions divided by the total process operating time in a semi-annual reporting period does not exceed 10 percent. [40 CFR 63.446(g)]
34. Excess emissions shall only occur when the condensate collection and treatment of pulping process condensate do not satisfy the requirements of Conditions 30.f and 32.

SUBPART S PULP AND PAPER NESHAP -- CLEAN CONDENSATE ALTERNATIVE (CCA)

35. **Applicable Requirement:** As an alternative to the requirements specified in Condition 29 for the control of HAP emissions from pulping systems using the kraft process, the permittee shall demonstrate to the satisfaction of LRAPA by meeting all the requirements below that the total HAP emissions reductions achieved by this CCA technology are equal to or greater than the total HAP emission reductions that would have been achieved by compliance with Condition 29.a by meeting the following requirements. [40 CFR 63.447]
- 35.a. For the purposes of this CCA section only, the following additional definitions apply. [40 CFR 63.447(a)]
- 35.a.i. CCA-affected source means the total of all HAP emission points in the pulping, bleaching, causticizing, and papermaking systems (exclusive of HAP emissions attributable to additives to paper machines and HAP emission points in the LVHC system).
- 35.a.ii. Causticizing system means all equipment associated with converting sodium carbonate into active sodium hydroxide. The equipment includes smelt dissolving tanks, lime mud washers and storage tanks, white and mud liquor clarifiers and storage tanks, slakers, slaker grit washers, lime kilns, green liquor clarifiers and storage tanks, and dreg washers ending with the white liquor storage tanks prior to the digester system, and any other equipment serving the same function as those previously listed.
- 35.a.iii. Papermaking system means all equipment used to convert pulp into paper, paperboard, or market pulp, including the stock storage and preparation systems, the paper or paperboard machines, and the paper machine white water system, broke recovery systems, and the systems involved in calendering, drying, on-machine coating, slitting, winding, and cutting.
- 35.b. The permittee shall install and operate a CCA technology with a continuous monitoring system to reduce total HAP emissions by treating and reducing HAP concentrations in the pulping process water used within the clean condensate alternative affected source. [40 CFR 63.447(b)]
- 35.c. The permittee shall calculate HAP emissions on a kilogram per megagram of ODP (or lb/ODTP) basis and measure HAP emissions according to the appropriate procedures contained in Condition 47. [40 CFR 63.447(c)]
- 35.d. The permittee shall determine the baseline HAP emissions for each equipment system and the total of all equipment systems in the clean condensate alternative affected source based on the following: [40 CFR 63.447(d)]
- 35.d.i. Process and air pollution control equipment installed and operating on or after December 17, 1993, and
- 35.d.ii. Compliance with the following requirements that affect the level of HAP emissions from the CCA affected source:
- 35.d.ii.A. The pulping process condensate requirements in Condition 30;
- 35.d.ii.B. The applicable effluent limitation guidelines and standards in 40 CFR part 430, subparts A, B, D, and E; and
- 35.d.ii.C. All other applicable requirements of local, State, or Federal agencies or statutes.
- 35.e. The permittee shall determine the following HAP emission reductions from the baseline HAP emissions determined in Condition 35.d for each equipment system and the total of all equipment systems in the CCA affected source: [40 CFR 63.447(e)]
- 35.e.i. HAP emission reduction occurring by complying with the requirements of Condition 29.a; and
- 35.e.ii. HAP emissions reduction occurring by implementing the CCA technology.

- 35.f. For the purposes of all requirements in this section, the permittee may use as an alternative individual equipment systems (instead of the total of all equipment systems) within the CCA affected source to determine emissions and reductions to demonstrate equal or greater than the reductions that would have been achieved by compliance with Condition 29.a. [40 CFR 63.447(f)]
- 35.g. The initial and updates to the control strategy report specified in Condition 29 shall include to the extent possible the following information: [40 CFR 63.447(g)]
 - 35.g.i. Detailed description of:
 - 35.g.i.A. Equipment systems and emission points that comprise the CCA affected source;
 - 35.g.i.B. Air pollution control technologies that would be used to meet the requirements of Condition 29.a; and
 - 35.g.i.C. CCA technology to be used.
 - 35.g.ii. Estimates, and basis for the estimates, of total HAP emissions and emissions reductions to fulfill the requirements of Conditions 35.d, 35.e, and 35.f.

CCA Compliance Demonstration

- 35.h. The permittee shall use the CCA provided for under 40 CFR Subpart S Subpart 63.447 for compliance with the HVLC requirements under 40 CFR Subpart S Subpart 63.443. The initial compliance demonstration with the CCA requirements is satisfied based on the Weyerhaeuser Springfield MACT I Phase 2 CCA Project Report dated October 7, 2003, submitted to LRAPA on July 26, 2004, with the Title V renewal application. [40 CFR 63.447(h)]
- 35.i. The CCA baseline emission rate minimum emission reduction established under Condition 35.e.i is 1.87 lb/ODTP as methanol (CCA report dated October 7, 2003). The permittee's CCA projects in Condition 35.j must produce HAP emission reductions equal to or greater than 1.87 lb/ODTP as methanol to comply with Condition 35.f. [40 CFR 63.447(h)]
- 35.j. The CCA projects (from the CCA Project Report dated October 7, 2003) that are required to satisfy the Condition 35.e.ii emission reduction requirements include the following: [40 CFR 63.447(h)]
 - 35.j.i. The NCG pre-scrubber underflow liquid relocation flowing to the causticizers and the slakers changed to be piped directly to the Kamyr Continuous Digester completed as of April 2000;
 - 35.j.ii. The demolition of the No.1 and No.3 Slakers and replacement with a new low emission Slaker completed as of May 2000;
 - 35.j.iii. Operating and piping changes to replace the use of evaporator condensate to smelt dissolver scrubber with boiler blowdown condensate, steam condensate, caustic and fresh water makeup from the Recovery area outside flash tank completed in November 2002.

CCA Continuous Compliance

- 35.k. The permittee shall assure continuous compliance with Condition 35.j for the CCA by, at all times, maintaining the following conditions: [40 CFR 63.447(h)]
 - 35.k.i. Any piping that could allow the flow of the NCG scrubber underflow liquid to the slakers or causticizers shall be removed, or a lock and tag shall be utilized to prevent opening of the valve to the causticizers and/or slakers.
 - 35.k.ii. The NCG scrubber underflow liquid valve to the slakers and causticizers is normally closed as required by Condition 35.k.i. On the rare occasion while the facility is operating where the permittee determines a need to briefly open this normally closed valve for inspection, troubleshooting or maintenance, such exceptions shall be minimized as much as possible, and any such event shall be reported to LRAPA consistent with the MACT immediate reporting procedures in Condition 56.b, (report

must be submitted by phone or fax within two (2) working days after commencing actions.)

- 35.k.iii. The combined methanol emissions from the recaust sources, (including the slaker, causticizers, mud filters, mud washers, mud storage tanks, white and green liquor clarifiers, Dregs filter, and Kilns), and smelt dissolving tank vents shall not exceed 1.0 lb/ODTP as methanol. Monitoring shall be provided as in Condition 35.k.vi.
- 35.k.iv. Except as specified in this condition, only boiler-water blowdown condensate and/or mill/tempered water and/or caustic shall be used as liquid makeup to the Smelt Dissolving Tank Vent wet scrubbers. If the permittee's Recovery Hot Water System (mill water, tempered water, column bottoms steam-stripped condensate) must be used to allow maintenance on the Smelt Dissolving Tank Vent wet scrubber liquid makeup system, or any other reason where the hot water system must be used for makeup to the scrubber, then the permittee's Recovery Hot Water System shall not use condensate from the evaporators or stripper column bottoms stripped condensate as a supply source to the permittee's hot water system. When the hot water system is used for makeup to the scrubber, such events shall be recorded, and it shall be documented that condensate was not used. It shall be sufficient to document that condensate was not used, if:
- 35.k.v. No evaporator or steam stripped condensate shall be used on the No. 3 Recovery Dissolving Tank Vent Scrubbers, when No. 3 Recovery Furnace is operated.
- 35.k.vi. **Testing: At least once per year**, the Slaker vent, at least one (1) causticizer, and the Dissolving Tank Vent 4 Scrubber vent shall be tested for the methanol emission rate using EPA Method 308. The combined methanol emission rate for the Recast sources and Smelt Dissolving Tank Vents shall be less than or equal to 1.0 lb/ODTP methanol on a daily average basis, calculated from an annual throughput basis. This is the emission rate that provides the minimum CCA emission reduction to achieve a lower emission rate than the alternative under Condition 29. The combined emission rate in a given year for the Recast sources listed in Condition 35.k.iii, shall be calculated each year by testing an LRAPA-approved representative subset of those sources, including at least the slaker and one (1) causticizer, and factoring each Recast vent 2003 methanol emission rate, (from the 2003 CCA emission rate table in the Review Report) by the ratio of the current test year emission rate. (Example: Current year slaker emission rate / Year 2003 slaker emission rate * Year 2003 mud filter emission rate = Current year mud filter emission rate). The permittee may test all the sources, or test additional liquid process samples.
- 35.k.vii. If the No. 3 Recovery Furnace and No. 3 Smelt Dissolving Tanks are operated for more than 438 hours per year, then they shall also be tested in accordance with Condition 35.k.vi, using EPA Method 308 for methanol emission rate per Condition 182.
- 35.k.viii. **At least once per year**, to assure the Kamy washer methanol emissions are below the CCA baseline, the washwater to the Kamy washer, shall be sampled to assure the liquid concentration is below the October 7, 2003 CCA Project Report baseline of 500 ppm.
- 35.k.ix. **At least once per year**, the water makeup to the Recast area at the mud washer, shall be sampled to track the process condensate methanol concentration. There shall be no methanol concentration limit on this condensate, due to the emission limit already established on the Recast process under Condition 35.k.iii. [Note: The CCA baseline VCE condensate methanol concentration was 430ppm, where 550ppm equals the average concentration of 430 ppm plus one (1) standard deviation.]

PULP AND PAPER NESHAP -- ENCLOSURES AND CLOSED VENT SYSTEM APPLICABLE REQUIREMENTS

36. **Applicable Requirement:** The permittee shall comply with the following requirements for enclosures and closed-vent systems. [40 CFR 63.450]
- 36.a. Each enclosure and closed-vent system specified in Condition 29.b for capturing and transporting vent streams that contain HAP shall meet the requirements specified in Conditions 36.b through 36.d. [40 CFR 63.450(a)]
 - 36.b. Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in Condition 47.f. [40 CFR 63.450(b)]
 - 36.c. Each component of the closed-vent system used to comply with Condition 29.b that is operated at a positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in Condition 27. [40 CFR 63.450(c)] Monitoring for this condition shall follow the procedures in Conditions 42.a through 42.e.
 - 36.d. Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in Condition 29.b shall comply with either of the following requirements: [40 CFR 63.450(d)]
 - 36.d.i. On the NCG system emergency auto-vent valve in Condition 29.d.i, the permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. To meet this requirement the permittee shall continuously monitor any automatic vent bypass valves on the LVHC NCG collection with a data acquisition system and any valve output signal greater than 0% shall be recorded and reported as a potential venting condition, in accordance with LRAPA 33-070 and 40 CFR 63.450 and Condition 126.
 - 36.d.ii. For bypass line valves that are not computer controlled, such as the batch digester manual valve in Condition 29.d.i, the permittee shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism or a cable and lock. The permittee shall maintain the the batch digester manual vent valve on the LVHC NCG collection system in a closed position with a car seal or cable and lock so that the valve can not be opened without breaking the seal or cutting the lock. The permittee shall maintain a log identifying when, and for how long, any valve subject to this condition is open.

PULP AND PAPER NESHAP - INDIVIDUAL DRAIN SYSTEM REQUIREMENTS

37. **Applicable Requirement:** The permittee shall comply with the following requirements for individual drain systems. [40 CFR 63.446(d)(1) and 40 CFR 63.962]
- 37.a. The permittee shall control air emissions from the individual drain system used to control emissions from pulping condensates using one or a combination of the following: [40 CFR 63.962(a)]
 - 37.a.i. Covers, water seals, and other air emission control equipment as specified in Condition 37.b.
 - 37.a.ii. Hard-piping.
 - 37.a.iii. Venting of the individual drain system through a closed vent system to a control device in accordance with the following requirements:
 - 37.a.iii.A. The individual drain system is designed and operated such that an internal pressure in the vapor headspace in the system is maintained at a level less than atmospheric pressure when the control device is operating, and

- 37.a.iii.B. The closed vent system and control device are designed and operated in accordance with the requirements of Conditions 30.c and 36.
- 37.b. If air emissions from an individual drain system are controlled in accordance with Condition 37.a.i, the permittee shall meet the following requirements: [40 CFR 63.962(b)]
 - 37.b.i. The individual drain system shall be designed to segregate the organic vapors from wastewater managed in the controlled individual drain system from entering any other individual drain system that is not controlled for air emissions in accordance with the standards specified in this condition.
 - 37.b.ii. **Drain Control Requirements.** Each drain shall be equipped with either a water seal or a closure device in accordance with the following requirements:
 - 37.b.ii.A. When a water seal is used, the water seal shall be designed such that either:
 - 37.b.ii.A.(1) The outlet to the pipe discharging the wastewater extends below the liquid surface in the water seal of the drain; or
 - 37.b.ii.A.(2) A flexible shield or other device is installed which restricts wind motion across the open space between the outlet of the pipe discharging the wastewater and the drain.
 - 37.b.ii.B. When a closure device is used (e.g., securing a cap or plug on a drain that is not receiving wastewater), the closure device shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the drain opening and the closure device.
 - 37.b.iii. **Operating Requirements.** The permittee shall operate the air emission controls required by Condition 37.b.ii in accordance with the following requirements:
 - 37.b.iii.A. Each closure device shall be maintained in a closed position whenever wastewater is in the individual drain system except when it is necessary to remove or open the closure device for sampling or removing material in the individual drain system, or for equipment inspection, maintenance, or repair.
 - 37.b.iii.B. Each drain equipped with a water seal and open to the atmosphere shall be operated to ensure that the liquid in the water seal is maintained at the appropriate level. Examples of acceptable means for complying with this provision include but are not limited to using a flow-monitoring device indicating positive flow from a main to a branch water line supplying a trap; continuously dripping water into the trap using a hose; or regular visual observations.

PULP AND PAPER NESHAP -- MONITORING REQUIREMENTS

Monitoring

- 38. The permittee shall perform the following monitoring: [40 CFR 63.453]
 - 38.a. The permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a Continuous Monitoring System (CMS) as specified in Conditions 38.b through 42.h, except as allowed in Condition 42.h. The CMS shall include a continuous recorder. [40 CFR 63.453(a)]
 - 38.b. Under Scenario I, in accordance with Conditions 38.a, 41 and 41.a, a CMS shall be operated to measure the methanol outlet concentration to comply with the steam stripper outlet concentration requirement specified in Condition 32.a. [40 CFR 63.453(h)]

- 38.c. In accordance with Conditions 38.a, 41 and 41.a, a CMS shall be operated to measure the appropriate parameters determined according to the procedures specified in Condition 42.h to comply with the condensate applicability requirements specified in Condition 30.c. [40 CFR 63.453(i)]
- 38.d. At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.453(q)]

Steam Stripper Parameter Values Triggering Efficiency Testing Under Scenario I

- 39. Applicable Requirement: Except during periods of Startup, Shutdown or Malfunction, if any steam stripper operating parameter falls outside the parameter ranges established in accordance with Condition 40, the permittee shall conduct a source test of the stripper efficiency in accordance with Condition 40 within 14 calendar days of the onset of the parameter excursion. [40 CFR 63.446(e) and 40 CFR 63.453(n)]

Establishing and Changing Steam Stripper Operating Parameters

- 39.a. In 2001, the permittee submitted a summary report of the testing and analyses used to determine the initial operating parameter ranges for the steam stripper. Testing was in accordance with Condition 43.
- 39.b. The permittee may voluntarily change the operating parameter range at any time if the change and the date that the change is made are contemporaneously recorded in a log that is made available to LRAPA on request. The operating parameter ranges shall conform with the requirements of Condition 39.b and shall be effective retroactively from the date of the source test used to establish the parameter.
- 39.c. The operating parameter ranges shall conform with the following: [40 CFR 63.453(n)]
 - 39.c.i. Operating parameter ranges shall be established from the parameter monitoring data collected during source tests.
 - 39.c.ii. The steam to wastewater feed ratio shall be no less than 97.5 percent of the lowest steam to wastewater feed ration measured during a source test that returned a compliant result.
 - 39.c.iii. The process wastewater column feed temperature shall be no less than 30 degrees F less than the lowest column feed temperature measured during a source test that returned a compliant result.

CMS to Monitor Stripper Parameters under Scenario I

- 40. Monitoring Requirement: The permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a Continuous Monitoring System (CMS) to monitor steam stripper operating parameters used to comply with the treatment requirements in Condition 32.a (6.6 lb/ton) as specified below: [40 CFR 63.453(a)]
- 40.a. The CMS shall be installed, operational and the data verified either prior to or in conjunction with conducting the initial performance test. [40 CFR 63.8(c)(3)]
- 40.b. The following parameters shall be monitored: [40 CFR 63.453(g)]
 - 40.b.i. The process wastewater feed rate;
 - 40.b.ii. The steam feed rate; and
 - 40.b.iii. The process wastewater column feed temperature.

- 40.c. The steam-to-wastewater-feed ratio (steam feed/process wastewater feed) shall be continuously calculated from the steam feed rate and process wastewater feed rate monitored above.
- 40.d. The CMS shall include a continuous recorder. [40 CFR 63.453(a)]
- 40.e. **Recordkeeping:** The permittee shall record the following: [OAR 340-218-0050(3)(b)]
 - 40.e.i. The operating parameter ranges and the dates on which the operating parameter ranges became effective.
 - 40.e.ii. Each 1-hour/3-hour average parameter reading.
 - 40.e.iii. Each 1-hour/3-hour steam-to-wastewater-feed ratio (steam feed/process wastewater feed).
 - 40.e.iv. All periods of operation outside of allowed parameter ranges.

Requirement to Operate Within Parameter Ranges

- 40.f. The permittee shall operate all control devices subject to the monitoring provisions of this condition in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under this condition and established under this permit. Except as provided in Condition 29.d (1% excess emission allowance on LVHC) or Condition 33 (10% excess emission allowance on condensate stripper), operation of a control device below minimum operating parameter values or above maximum operating parameter values established under Conditions 40 and 41 of this permit, or failure to perform procedures required by Conditions 40 and 41 of this permit, shall constitute a violation of the applicable emission standard of this permit and be reported as a period of excess emissions. [40 CFR 63.453(o)]

SCENARIO I:

Monitoring To Demonstrate Compliance With Condensate Collection And Treatment Requirements

- 41. Under operating Scenario I, identified in Condition 4, the permittee may demonstrate compliance with the standards contained in Condition 32.a (6.6 treated pounds of methanol per ODP) and Condition 30.f (7.2 collected pounds methanol per ton of ODP) by continuously monitoring (using the LRAPA-approved method in Condition 41) the amount of methanol collected and treated using the HAP reduction methods in Condition 30.c. Compliance with Condition 32.a shall be demonstrated by the permittee whenever the amount of methanol controlled is equal to or greater than 6.6 lb/ton of ODP, on a rolling average time basis not to exceed 60 days. Compliance with Condition 30.f shall be demonstrated by the permittee whenever the amount of methanol collected is equal to or greater than 7.2 lb/ton of ODP on a rolling average time basis not to exceed 60 days. Failure to meet one (1) of these standards for any authorized averaging period shall constitute a single violation of the underlying standard for the last day of the averaging period. If this compliance demonstration method is utilized, then compliance shall be demonstrated using the procedures in Condition 41.
 - 41.a. Under Scenario I, in Condition 41, for demonstrating compliance with either Condition 32.a (6.6 lb/ton) or Condition 30.f (7.2 lb/ton), the permittee shall use the following procedures:
 - 41.a.i. Determine the mass quantity of methanol treated according to Condition 32.a (6.6 lb/ton treated) by continuously monitoring the mass quantity of methanol in the product methanol stream by using a surrogate method of measuring methanol concentration, i.e., liquid product methanol density or stripper column top pressure/temperature ratio, and measuring the product methanol flow, and pulp production. The permittee shall provide quality assurance of this CMS by following the requirements of Condition 26.a (CMS QA plan).
 - 41.a.i.A. The following equation shall be used to calculate mass generation rate of methanol in lb/min (kg/min):

$$\frac{\text{Mass Fraction of Methanol in Product Methanol Stream} \times \text{Stream Density} \times \text{Stream Flow}}{\text{Sum of Pounds per Minute for Each Minute During Averaging Period} / \text{Total Pulp Produced During Averaging Period}}$$

- 41.a.i.B. The following equation shall be used to calculate the mass quantity of methanol treated in the previous averaging time period in lbs/ODT (kg/ODT):

$$\frac{\text{Sum of Pounds per Minute for Each Minute During Averaging Period}}{\text{Total Pulp Produced During Averaging Period}}$$

- 41.a.ii. Determine the mass quantity of methanol collected according to Condition 27.a by using the following equation:

$$\frac{(\text{Methanol Treated as Determined in Condition 41.a.i.B})}{(\text{Methanol Stripping Efficiency of Steam Stripper (lb out/lb fed)})}$$

SCENARIO I:

Initial Performance Test completed in October 2001 and reported December 11, 2001.

- 41.b. The initial performance test requirements for Scenario I were completed in accordance with Condition 43 and the results were submitted to LRAPA on December 11, 2001. The Scenario I initial performance test consisted of monitoring under the requirements of Condition 41 and 41.a, where a CMS was used to calculate the quantity of methanol collected and treated using the calculation under Condition 41. The permittee shall continue to monitor for compliance by following Condition 41 to provide the CMS to monitor condensate treatment and Condition 41.c annual stripper methanol efficiency testing to monitor condensate methanol collection.

SCENARIO I:

Validating Stripper Efficiency Value To Calculate Condensate Collection And Treatment Quantity From Treatment Quantity

- 41.c. The initial value for the methanol stripping efficiency of the steam stripper used in Condition 41.a.ii shall be 0.96 pound out per pound feed.
- 41.c.i. **At least once per year** the permittee shall validate the methanol stripping efficiency used to calculate methanol collection under Scenario I or to demonstrate compliance with Condition 27.a by using the following procedures on three (3) randomly-selected days over a two- (2) week period;
- 41.c.ii. Over a 24-hour period, take three (3) samples of foul condensate on each feed stream and three (3) samples of the steam-stripped condensate;
- 41.c.iii. Combine the three (3) samples into a composite sample and determine the methanol concentration using EPA Method 305, NCASI method DI/MeOH 94.02 or an alternative method approved by EPA, and determine the density of each stream;
- 41.c.iv. During the 24-hour period, measure the flow rate of the streams that were sampled;
- 41.c.v. Calculate the daily pounds of methanol in each sampled stream;
- 41.c.vi. Calculate the methanol stripping efficiency using the following equation:

$$\frac{(\text{Pounds of Methanol in the Feed Streams})}{(\text{Pounds of Methanol in the Steam-Stripped Condensate Stream})}$$

- 41.c.vi.A. The numerator in this calculation may also be calculated using the product methanol flow and concentration (or an average of both methods), provided the product methanol stream is sampled and tested according to conditions and the permittee maintains all appropriate records;
- 41.c.vi.B. If the stripper steam to feed stream mass ratio deviates from the parameter values reported in accordance with Condition 39, excluding periods of startup, shutdown or malfunction, the permittee shall perform testing in order to determine a new methanol stripping efficiency, using the procedures in Condition 41.c;
- 41.c.vii. If the stripper steam to feed stream mass ratio and feed stream temperature(s) have not deviated outside of the parameter range, excluding periods of startup, shutdown or malfunction, the methanol stripping efficiency measured in accordance with Condition 41.c shall be averaged with the previously-measured methanol stripping efficiency values in order to determine a new methanol stripping efficiency.

Closed System Monitoring

42. The permittee shall demonstrate compliance with Condition 36 by performing the requirements specified in Conditions 42.a through 42.f. [40 CFR 63.453(k)]
- 42.a. For each enclosure opening, a visual inspection of the closure mechanism specified in Condition 36.b shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed.
 - 42.b. Each closed vent system required by Condition 36.ashall be visually inspected every 30 days and at other times as requested by LRAPA. LRAPA considers the 30-day frequency satisfied, if the permittee inspects once per calendar month and each inspection is at least three (3) weeks apart. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.
 - 42.c. For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in Condition 36.c measured initially and annually by the procedures in Condition 47.e.
 - 42.d. Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in Condition 47.f.
 - 42.e. The valve or closure mechanism specified in Condition 36.d.ii shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.
 - 42.f. If an inspection required by Conditions 42.a through 42.e identifies visible defects in ductwork, piping, enclosures or connections to covers required by Condition 36, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable. [40 CFR 63.453(k)(6)]
 - 42.f.i. A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than five (5) calendar days after the problem is identified.
 - 42.f.ii. The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown, or if the permittee determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair to such equipment shall be completed by the end of the next process unit shutdown.
 - 42.g. The permittee shall demonstrate compliance with Condition 31 by performing the requirements specified in Conditions 42.g.i through 42.g.iii. [40 CFR 63.453(l)]
 - 42.g.i. Each pulping process condensate closed collection system shall be visually inspected every 30 days and shall comply with the following inspection and monitoring requirements. LRAPA considers the 30-day frequency satisfied, if the permittee inspects once per calendar month and each inspection is at least 3 weeks apart.
 - 42.g.i.A. The individual drain system shall be visually inspected by the permittee as follows to check for defects that could result in air emissions to the atmosphere. [40 CFR 63.964(a)(1)]
 - 42.g.i.A.(1) The permittee shall visually inspect each drain as follows:
 - 42.g.i.A(1)(a) In the case when the drain is using a water seal to control air emissions, the permittee shall verify appropriate liquid levels are being maintained and identify any other defects that could reduce water seal control effectiveness.
 - 42.g.i.A(1)(b) In the case when the drain is using a closure device to control air emissions, the owner or operator shall visually inspect each drain to verify that the closure device is in place and

there are no defects. Defects include, but are not limited to, visible cracks, holes, or gaps in the closure devices; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing plugs, caps, or other closure devices.

- 42.g.i.A.(2) The permittee shall visually inspect each junction box to verify that closure devices are in place and there are no defects. Defects include, but are not limited to, visible cracks, holes, or gaps in the closure devices; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
- 42.g.i.A.(3) The permittee shall visually inspect the unburied portion of each sewer line to verify that all closure devices are in place and there are no defects. Defects include, but are not limited to, visible cracks, holes, gaps, or other open spaces in the sewer line joints, seals, or other emission interfaces.
- 42.g.i.A.(4) The permittee shall perform the inspections initially at the time of installation of the water seals and closure devices for the individual drain system and, thereafter, at least once every year.
- 42.g.i.A.(5) In the event that a defect is detected, the permittee shall repair the defect in accordance with the requirements Condition 42.g.i.B.
- 42.g.i.A.(6) The permittee shall maintain a record of the inspection in accordance with the requirements specified in Condition 43.b.
- 42.g.i.B. The permittee shall comply with the inspection and monitoring requirements for closed-vent systems and control devices specified in Conditions 38 and 38.b.
- 42.g.i.C. The permittee shall repair all detected defects as follows: [40 CFR 63.964(b)]
 - 42.g.i.C.(1) The permittee shall make first efforts at repair of the defect no later than five (5) calendar days after detection and repair shall be completed as soon as possible but no later than 15 calendar days after detection except as provided in Condition 42.g.i.C.(2).
 - 42.g.i.C.(2) Repair of a defect may be delayed beyond 15 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the individual drain system and no alternative capacity is available at the facility site to accept the wastewater normally managed in the individual drain system. In this case, the owner or operator shall repair the defect at the next time the process or unit that is generating the wastewater managed in the individual drain system stops operation. Repair of the defect shall be completed before the process or unit resumes operation.
 - 42.g.i.C.(3) The permittee shall maintain a record of the defect repair in accordance with the requirements specified in Condition 43.b.ii.
- 42.g.ii. Each condensate tank used in the closed collection system shall be operated with no detectable leaks as specified in Condition 31.a measured initially and annually by the

procedures specified in Condition 47.e. The tanks covered by this condition include the following:

- 42.g.ii.A. CSD A, B, and C tanks and turpentine decanters (except that cold storage or cold polishing decanter are not included);
 - 42.g.ii.B. Batch decanter underflow tank (named WX tank);
 - 42.g.ii.C. BAST (Batch Accumulator Surge Tank, if Batch Digesters operate); and
 - 42.g.ii.D. Accumulator Tank (if Batch Digesters operate).
- 42.g.iii. If an inspection required by this section identifies visible defects in the closed collection system, or if an instrument reading of 500 parts per million or greater above background is measured, then corrective actions specified in Condition 42.g.i.B shall be taken.

Alternate Controls or Parameters Require CMS to Monitor Parameters

- 42.h. If the permittee uses a control device, technique or an alternative parameter other than those specified in Conditions 38.c through 42.g, the permittee shall install a CMS and establish appropriate operating parameters to be monitored that demonstrate, to LRAPA's satisfaction, continuous compliance with the applicable control requirements. [40 CFR 63.453(m)]

Vent Collection System Monitoring

- 42.i. The permittee shall monitor the parameters specified in this condition whenever any equipment included in the LVHC or HVLC systems are operating. [OAR 340-218-0050(3)(a), 40 CFR 63.6(e), 63.10(b)]:
- 42.i.i. All periods in which the LVHC and HVLC systems is operating shall be recorded;
 - 42.i.ii. All periods in which the LVHC and HVLC systems is operating and a control device is not in use shall be recorded;
 - 42.i.iii. All periods in which a control device is in use but is functioning outside the required parameter range shall be recorded; and
 - 42.i.iv. All periods of bypassing from the LVHC and/or HVLC main vents valve(s) listed in Condition 29.d.i under the monitoring method requirements in Condition 36.d.
 - 42.i.iv.A. Bypassing shall be monitored at least once every 15 minutes by use of a flow indicating device installed in each bypass line, or by use of any indicating device(s) that provide(s) a positive indication of bypassing. [40 CFR 63.450(d)]
 - 42.i.iv.B. The duration of the use of bypass valves on computer controlled valves. [40 CFR 63.454(b)(12)]

PULP AND PAPER NESHAP -- RECORDKEEPING REQUIREMENTS

Recordkeeping

43. The permittee shall maintain the following records: [40 CFR 63.454 and 40 CFR 63.965]
- 43.a. The permittee shall comply with the applicable recordkeeping requirements of 40 CFR 63.10 as shown in 40 CFR Part 63 – Subpart S, Table 1, including Conditions 26 through 28 and the requirements found in Conditions 43.b through 43.d. [40 CFR 63.454(a)]
- 43.b. The permittee shall prepare and maintain the following records: [40 CFR 63.965(a)]
- 43.b.i. A written site-specific individual drain system inspection plan that includes a drawing or schematic of the individual drain system and identifies each drain, junction box, and sewer line location.
- 43.b.ii. A record of the date that each inspection required by Condition 42.g.i.A is performed.
- 43.b.iii. When applicable, a record for each defect detected during inspections required by Condition 42.g.i.A that includes the following information:
- 43.b.iii.A. Location of the defect,
- 43.b.iii.B. Description of the defect,
- 43.b.iii.C. Date of detection,
- 43.b.iii.D. Corrective action taken to repair the defect, and
- 43.b.iii.E. Date that the corrective action was completed.
- 43.c. For each applicable enclosure opening, closed-vent system, and closed collection system, the owner or operator shall maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection: [40 CFR 63.454(b)]
- 43.c.i. Date of inspection;
- 43.c.ii. Equipment type and identification;
- 43.c.iii. Results of negative pressure tests for enclosures;
- 43.c.iv. Results of leak detection tests;
- 43.c.v. Nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);
- 43.c.vi. Date the defect or leak was detected and the date of each attempt to repair the defect or leak;
- 43.c.vii. Repair methods applied in each attempt to repair the defect or leak;
- 43.c.viii. Reason for the delay if the defect or leak is not repaired within 15 days after discovery;
- 43.c.ix. Expected date of successful repair of the defect or leak if the repair is not completed within 15 days; and
- 43.c.x. Duration of the use of bypass valves on computer controlled valves.
- 43.d. The permittee shall record the CMS parameters specified in Condition 38 and meet the requirements specified in Condition 43.a for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Pulp and Paper Industry due to a process change or modification. [40 CFR 63.454(d)]
- 43.e. *Recordkeeping of malfunctions.* The permittee shall maintain the following records of malfunctions: [40 CFR 63.454(g)]
- 43.e.i. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

- 43.e.ii. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.453(q), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

PULP AND PAPER NESHAP -- REPORTING REQUIREMENTS SPECIFIC TO SUBPART S

Reporting

44. The permittee shall meet the notification requirements specified in Subpart A upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of 40 CFR Part 63 due to a process change or modification. [40CFR 63.455(d)]
45. *Malfunction reporting requirements.* If a malfunction occurred during the reporting period, the report must include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.453(q), including actions taken to correct a malfunction. [40CFR 63.455(g)]
46. The permittee shall submit performance test reports as specified in paragraphs (h)(1) through (4) of 40 CFR 63.455. [40CFR 63.455(h)]

PULP AND PAPER NESHAP -- TESTING REQUIREMENTS

Testing

47. Initial and repeat performance tests are required for the emissions sources specified in paragraphs (a)(1) and (2) of this section, except for emission sources controlled by a combustion device that is designed and operated as specified in §63.443(d)(3) or (4). [40 CFR 63.457]
 - 47.a. Conduct an initial performance test for all emission sources subject to the limitations in §§63.443, 63.444, 63.445, 63.446, and 63.447.
 - 47.b. Conduct repeat performance tests at five-year intervals for all emission sources subject to the limitations in §§63.443, 63.444, and 63.445. The first of the 5-year repeat tests must be conducted **by September 7, 2015, and thereafter within 60 months** from the date of the previous performance test. Five-year repeat testing is not required for the following:
 - 47.b.i. Knotter or screen systems with HAP emission rates below the criteria specified in §63.443(a)(1)(ii).
 - 47.b.ii. Decker systems using fresh water or paper machine white water, or decker systems using process water with a total HAP concentration less than 400 parts per million by weight as specified in §63.443(a)(1)(iv).
 - 47.c. **Vent Sampling Port Locations and Gas Stream Properties.** For purposes of selecting vent sampling port locations and determining vent gas stream properties, required in Conditions 29 and 30, the permittee shall comply with the applicable procedures in 40 CFR 63.457(b). [40 CFR 63.457(b)]
 - 47.d. **Liquid Sampling Locations and Properties.** For purposes of selecting liquid sampling locations and for determining properties of liquid streams such as wastewaters, process waters, and condensates required in Conditions 30 and 35, permittee shall comply with the procedures in 40 CFR 63.457(c). [40 CFR 63.457(c)]
 - 47.e. **Detectable Leak Procedures.** Initially, to measure detectable leaks for closed-vent systems as specified in Condition 36 or for pulping process wastewater collection systems as specified in Condition 31.b.i, the permittee shall comply with the requirements in 40 CFR 63.457(d) or an equivalent leak detection procedure approved in accordance with 40CFR63.8(4)(i). [40 CFR 63.457(d)]

- 47.f. Negative Pressure Procedures. To demonstrate negative pressure at process equipment enclosure openings as specified in Condition 36.b, the permittee shall use one of procedures specified in 40 CFR 63.457(e). [40 CFR 63.457(e)]
 - 47.g. HAP Concentration Measurements. For purposes of complying with the requirements in Conditions 29 and 30, the permittee shall measure the total HAP concentration as one of the options in 40 CFR 63.457(f). [40 CFR 63.457(f)]
 - 47.h. Condensate HAP Concentration Measurement. For purposes of complying with the kraft pulping condensate requirements in Condition 30, the permittee shall measure the total HAP concentration as methanol. [40 CFR 63.457(g)]
 - 47.i. Vent Gas Stream Calculations. To demonstrate compliance with the mass emission rate, mass emission rate per megagram of ODP, and percent reduction requirements for vent gas streams specified in Conditions 29 and 30, permittee shall use the procedures specified in 40 CFR 63.457(i). [40 CFR 63.457(i)]
 - 47.j. Liquid Stream Calculations. To demonstrate compliance with the mass flow rate, mass per megagram of ODP, and percent reduction requirements for liquid streams specified in Condition 30, the permittee shall use the procedures specified in 40 CFR 63.457(j). [40 CFR 63.457(j)]
 - 47.k. Condensate Segregation Procedures. Compliance with the condensate segregation requirements specified in Condition 30.c shall be determined using the procedures specified in 40 CFR 63.457(m). [40 CFR 63.457(m)]
48. RESERVED: Condition reserved to keep numbering intact.

SOURCE TESTING & EMISSION FACTOR VERIFICATION PROCEDURE

49. If source testing and/or emission factor verification is required, the permittee shall use the following procedures, unless otherwise specified in this permit or approved in writing by LRAPA: [LRAPA 35-0120 OAR 340-218-0040(4), and OAR 340-218-0050(3)]
- 49.a. Pretest Notification and Test Plan Submittal:
- 49.a.i. In the case of initial performance tests (also referred to as initial performance (source) tests), the permittee shall notify LRAPA at least 60 days prior to the initial performance test by submitting a source test plan in accordance with ODEQ's *Source Sampling Manual* [40 CFR 63.7(b)(1)]; otherwise
 - 49.a.ii. In the case of source tests and emission factor verification tests (other than initial performance tests), the permittee shall notify LRAPA at least 15 days prior to conducting any source tests or emission factor verification tests by submitting a source test plan in accordance with ODEQ's *Source Sampling Manual*.
- 49.b. Submittal of Test Results:
- 49.b.i. The permittee shall submit a summary of all initial performance tests to LRAPA within 60 days. The summary shall include the following information: [40 CFR 63.10(d)(2)]
 - 49.b.i.A. Emissions unit and monitoring point identification;
 - 49.b.i.B. Emission results in units that are consistent with the emissions limits on the emissions unit(s) being tested (e.g., gr/dscf, lb/hour, lb per unit throughput, etc.);
 - 49.b.i.C. Process parameters during the test (e.g., material throughput, types and amounts of fuels used, heat input, etc.); and
 - 49.b.i.D. Control device operating parameters, if applicable.
 - 49.b.ii. The permittee shall submit a summary of all source tests and emission factor verification tests (other than initial performance tests) to LRAPA within 60 days of any test. The summary shall include the following information:
 - 49.b.ii.A. Emissions unit and monitoring point identification;
 - 49.b.ii.B. Emission results in units that are consistent with the emissions limits on the emissions unit(s) being tested (e.g., gr/dscf, lb/hour, lb per unit throughput, etc.);
 - 49.b.ii.C. Process parameters during the test (e.g., material throughput, types and amounts of fuels used, heat input, etc.); and
 - 49.b.ii.D. Control device operating parameters, if applicable.
- 49.c. The permittee shall conduct all testing in accordance with the ODEQ's *Source Sampling Manual*. [LRAPA 35-0120]
- 49.d. Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test and within two (2) hours prior to the tests. Any operating adjustments made during a compliance source test, which are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid.
- 49.e. Performance tests shall be conducted under such conditions as LRAPA specifies to the permittee based on representative performance of the affected source for the period being tested. Upon request, the permittee shall make available to LRAPA such records as may be necessary to determine the conditions of performance tests. [40 CFR 63.457(o)]

Pretest Runs

- 49.f. For the purpose of establishing operating parameter ranges, the permittee may perform pretest runs at any time prior to the compliance source test or emission factor verification test, subject to the following conditions:
 - 49.f.i. Pretest run results are intended only to help predetermine operating parameter values to be used during the actual compliance source testing or emission factor verification testing, but may not be used themselves to establish operating parameter ranges required elsewhere in this permit;
 - 49.f.ii. Pretest runs may be of any duration;
 - 49.f.iii. Pretest run results may not be used as part of the compliance demonstration or emission factor verification; and
 - 49.f.iv. Pretest runs must be completed prior to beginning the compliance source testing or emission factor verification testing, and no pretest runs may be conducted between individual compliance source test or emission factor verification test runs.
 - 49.g. All compliance source tests shall be performed at 90 to 110 percent of the normal maximum operating rate. For purposes of this permit, the normal maximum operating rate is defined as the 90th percentile of the average daily operating rates during a 12-month period immediately preceding the source test.
 - 49.h. Each source test shall consist of at least three (3) test runs and the emissions results shall be reported as the arithmetic average of all valid test runs. For a source test to be accepted, there must be at least two (2) valid test runs.
50. Wherever Subpart A specifies "postmark" dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark or other proof of send date is not required. Whenever the due date falls on a weekend or federal holiday, the due date is delayed to the next working day. [LRAPA 35-0160 and 40 CFR 63.2]

Table 7. Permit Location of 40 CFR 63 Requirements

‘na’ = not applicable

‘nn’ = not needed (i.e., the section applies but a permit condition is not needed)

40 CFR 63 Subpart S Section	Permit Condition Where Found	40 CFR 63 Subpart RR Section	Permit Condition Where Found	40 CFR 63 Subpart A Section	Permit Condition Where Found
63. 440a	nn	63. 961	24.b	63.2	24.e, , e., f, h, i
63. 440b	nn	63. 962	37		
63. 440c	nn	63. 963	na		
63. 440d	29.a	63. 964a1	42.g	63.8(d)(2)	26.a
63. 440e	na	63. 964b	42.g		
63. 440f	na	63. 965a	43.b		
63. 440g	nn			63.10	28, 43.a,
63. 441	definitions, 24.b, 24.n				
63. 442	na				
63. 443a	29.a				
63. 443b	na			63.10(d)(2)	41.a, 41.b
63. 443c	29.b			63.10(d)	195
63. 443d	29.c			63.8(c)(1)(ii)	26.b
63. 443e	29.d				
63. 444	na			63.10(b)(2)(x)	27.a
63. 445a	na			63.10(b)(2)(xi)	27.b
63. 445b	na			63.10(c)(5)	27.c, 28.f.i
63. 445c	na			63.10(c)(12)	27.d
63. 445d	na			63.10(c)(14)	27.e
63. 446a	nn				
63. 446b	30.a				
63. 446c	30.c			63.10(e)(3)	28
63. 446d	31			63.10(e)(3)(vii)	28.a
63. 446e	32			63.10(e)(3)(viii)	28.b
63. 446f	32.b			63.9(a)(4)(ii)	28.c
63. 446g	33			63.10(a)(5)	28.c
63. 446h	na				
63. 446I	na			63.10(e)(vi)	28.d
63. 447a	35			63.10(e)(3)(vi)(A)	28.d.i
63. 447b	35.b			63.10(e)(3)(vi)(B)	28.d.ii
63. 447c	35.c			63.10(e)(3)(vi)(C)	28.d.ii
63. 447d	35.d			63.10(e)(3)(vi)(D)	28.d.iv
63. 447e	35.e			63.10(e)(3)(vi)(E)	28.d.v
63. 447f	35.f			63.10(e)(3)(vi)(F)	28.d.v
63. 447g	35.g			63.10(e)(3)(vi)(H)	28.d.vii
				63.10(e)(3)(vi)(I)	28.d.viii
63. 448	na			63.10(e)(3)(vi)(J)	28.d.ix, 28.f.iii
63. 449	na			63.10(e)(3)(vi)(K)	28.d.x
63. 450a	36.a			63.10(e)(3)(vi)(L)	28.d.xi
63. 450b	36.b			63.10(e)(3)(vi)(M)	28.d.xii
63. 450c	36.c			63.10(c)(7)	28.e.i
63. 450d	36.d			63.10(c)(8)	28.e.ii
63. 451	na			63.10(e)(3)(vi)(I)	28.e.iii
63. 452	na			63.10(c)(6)	28.f.ii
63. 453a	38			63.8(c)(8)	28.f.ii
63. 453c	na				

40 CFR 63 Subpart S Section	Permit Condition Where Found	40 CFR 63 Subpart RR Section	Permit Condition Where Found	40 CFR 63 Subpart A Section	Permit Condition Where Found
63.453d	na				
63.453e	na				
63.453f	na				
63.453g	40				
63.453h	38.b				
63.453I	38.c				
63.453j	na				
63.453k	42				
63.453k6	42.f				
63.453l	42.g				
63.453m	42.h				
63.453n	39				
63.453o	43				
63.453p	na				
63.454a	43.a				
63.454b	43.c				
63.454c	na				
63.454d	43.d				
63.455c	na				
63.455d	42				
63.456	na				
63.457b	47.c				
63.457c	47.d				
63.457d	47.e				
63.457e	47.f				
63.457f	47.g				
63.457g	47.h				
63.457h	na				
63.457I	47.i				
63.457j	47.j				
63.457k	na				
63.457l	na				
63.457m	47.k				
63.457n	na				

Table 8 General Provisions Applicability to Subpart S

‘na’ = not applicable

‘nn’ = not needed (i.e., the section applies but a permit condition is not needed)

Reference	Applies to Subpart S	Comment from 40 CFR 63 Subpart A	Title V Permit Cross Reference
63.1(a)(1)-(3)	Yes		nn
63.1(a)(4)	Yes	Subpart S (this table) specifies applicability of each paragraph in subpart A to subpart S.	nn
63.1(a)(5)	No	Section reserved.	na
63.1(a)(6)	Yes		nn – informational in nature
63.1(a)(7-9)	No	Section reserved.	na
63.1(a)(10)	No	Subpart S and other cross-referenced subparts specify calendar or operating day.	na
63.1(a)(11)-(12)	Yes		nn
63.1(b)(1)	No	Subpart S specifies its own applicability.	na
63.1(b)(2)	No	Section Reserved	na
63.1(b)(3)	Yes		nn
63.1(c)(1)-(2)	Yes.		63.1(c)(1) nn; 63.1(c)(2) na – The permittee is not an Area Source
63.1(c)(3)-(4)	No	Section reserved.	na
63.1(c)(5)	Yes		63.1(c)(5) na – The permittee is not an Area Source
63.1(d)	No	Section reserved.	na
63.1(e)	Yes		nn
63.2	Yes		
63.3	Yes		nn
63.4(a)(1)-(2)	Yes		nn
63.4(a)(3)-(5)	No	Section reserved.	na
63.4(b)	Yes		nn
63.4(c)	Yes		nn
63.5(a)	Yes.		nn
63.5(b)(1)	Yes		nn
63.5(b)(2)	No	Section reserved.	na
63.5(b)(3)-(4)	Yes		nn
63.5(b)(5)	No	Section reserved.	na
63.5(b)(6)	Yes		nn
63.5(c)	No	Section reserved.	na
63.5(d)	Yes		nn
63.5(e)	Yes		nn
63.5(f)	Yes		nn

Reference	Applies to Subpart S	Comment from 40 CFR 63 Subpart A	Title V Permit Cross Reference
63.6(a)	Yes		nn
63.6(b)(1)-(5)	No	Subpart S specifies compliance dates for sources subject to Subpart S	nn
63.6(b)(6)	No	Section Reserved	nn
63.6(b)(7)	No	Subpart S specifies compliance dates for sources subject to Subpart S	nn
63.6(c)(1)-(2)	No	Subpart S specifies compliance dates for sources subject to Subpart S	nn
63.6(c)(3)-(4)	No	Section Reserved	nn
63.6(c)(5)	No	Subpart S specifies compliance dates for sources subject to Subpart S	nn
63.6(d)	No	Section Reserved	nn
63.6(e)(1)(i)	No	See 63.453(q) for general duty requirement	nn
63.6(e)(1)(ii)	No		na
63.6(e)(1)(iii)	Yes		nn
63.6(f)(1)	No		nn
63.6(f)(2)-(3)	Yes		nn
63.6(g)	Yes		na – The permittee is not planning to request an alternative emission limitation to those defined in subpart S.
63.6(h)	No	Pertains to continuous opacity monitors that are not part of this standard.	na
63.6(i)(1)-(14), (16)	Yes		nn – The permittee is not requesting an extension of compliance at this time.
63.6(i)(15)	No		na
63.6(j)	Yes		nn – We are not aware that the President intends to exempt The permittee from compliance
63.7(a)-(d)	Yes		Provides the general conditions for performance tests (required for condensate treatment and possibly the HVLC system)
63.7(e)(1)	No	Replaced with 63.457(o), which specifies performance testing conditions under Subpart S	nn
63.7(e)(2)-(4)	Yes		nn
63.7(f)	Yes		Provides the general conditions for performance tests (required for condensate treatment and possibly the HVLC system)

Reference	Applies to Subpart S	Comment from 40 CFR 63 Subpart A	Title V Permit Cross Reference
63.7(g)(1)	Yes		Provides the general conditions for performance tests (required for condensate treatment and possibly the HVLC system)
63.7(g)(2)	No	Section Reserved	na
63.7(g)(3)	Yes		Provides the general conditions for performance tests (required for condensate treatment and possibly the HVLC system)
63.7(h)	Yes		Provides the general conditions for performance tests (required for condensate treatment and possibly the HVLC system)
63.8(a)(1)-(2)	Yes		nn –Section 63.8 provides the general provisions for monitoring requirements.
63.8(a)(3)	No	Section reserved.	na
63.8(a)(4)	Yes		nn
63.8(b)(1)	Yes		nn
63.8(b)(2)	No	Subpart S specifies locations to conduct monitoring.	na
63.8(b)(3)	Yes		nn
63.8(c)(1)-(c)(1)(i)	No	See 63.453(q) for general duty requirements (which includes monitoring equipment)	na
63.8(c)(1)(ii)	Yes		nn
63.8(c)(1)(iii)	No		na
63.8(c)(2)-(3)	Yes		General provision for CMS installation
63.8(c)(4)	No	Subpart S allows site specific determination of monitoring frequency in §63.453(n)(4).	na
63.8(c)(5)	No	Pertains to continuous opacity monitors that are not part of this standard.	na
63.8(c)(6)-(8)	Yes	Operate CMS in accordance with manufacturer’s specification, then no other performance evaluation required	nn – Requirement for zero and high level drifts, Definition of “CMS out of control”, and Reporting of “CMS out of control”, respectively.
63.8(d)(1)-(2)	Yes		CMS QC program requirement
63.8(d)(3)	Yes, except for last sentence, which		SSM plans are not required

Reference	Applies to Subpart S	Comment from 40 CFR 63 Subpart A	Title V Permit Cross Reference
	refers to an SSM plan		
63.8(e)	Yes	Operate CMS in accordance with manufacturer's specification, then no other performance evaluation required.	nn – CMS performance evaluation requirements
63.8(f)(1)-(5)	Yes		nn – The permittee will propose mill specific CMS for condensate collection and treatment with in the requirements of Part S and does not plan to propose an alternate method that would invoke 63.8(f)
63.8(f)(6)	No	Subpart S does not specify relative accuracy test for CEM's.	na
63.8(g)	Yes		nn -May be referenced, provide general provisions for data reduction
63.9(a)	Yes		nn
63.9(b)(1)-(2)	Yes	Initial notifications must be submitted within one year after the source becomes subject to the relevant standard.	nn
63.9(b)(3)	No	Section reserved.	na
63.9(b)(4)-(5)	Yes	Initial notifications must be submitted within one year after the source becomes subject to the relevant standard.	nn
63.9(c)	Yes		nn
63.9(d)	No	Special compliance requirements are only applicable to kraft mills.	na – not a new source
63.9(e)	Yes		Notification of performance tests
63.9(f)	No	Pertains to continuous opacity monitors that are not part of this standard.	na
63.9(g)(1)	Yes		Notification of CMS performance evaluation
63.9(g)(2)	No	Pertains to continuous opacity monitors that are not part of this standard.	na
63.9(g)(3)	No	Subpart S does not specify relative accuracy tests, therefore no notification is required for an alternative.	na
63.9(h)(1)-(3)	Yes		nn - compliance report via Title V permit
63.9(h)(4)	No	Section reserved.	na
63.9(h)(5)-(6)	Yes		nn - compliance report via Title V permit
63.9(i)	Yes		Post mark

Reference	Applies to Subpart S	Comment from 40 CFR 63 Subpart A	Title V Permit Cross Reference
63.9(j)	Yes		Change in info
63.10(a)	Yes		nn
63.10(b)(1)	Yes		General recordkeeping requirements
63.10(b)(2)(i)	No		na
63.10(b)(2)(ii)	No	See 63.454(g) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction	na
63.10(b)(2)(iii)	Yes		General recordkeeping requirements
63.10(b)(2)(iv)-(v)	No		na
63.10(b)(2)(vi)-(xiv)	Yes		General recordkeeping requirements
63.10(b)(3)	Yes		General recordkeeping requirements
63.10(c)(1)	Yes		CMS recordkeeping Requirements
63.10(c)(2)-(4)	No	Section reserved.	na
63.10(c)(5)-(8)	Yes		CMS recordkeeping Requirements
63.10(c)(9)	No	Section reserved.	na
63.10(c)(10)-(11)	No	See 63.454(g) for malfunction recordkeeping requirements	na
63.10(c)(12)-(14)	Yes		CMS recordkeeping Requirements
63.10(c)(15)	No		na
63.10(d)(1)	Yes		nn (d) covers general reporting requirements
63.10(d)(2)	Yes		Performance test reporting
63.10(d)(3)	No	Pertains to continuous opacity monitors that are not part of this standard.	na
63.10(d)(4)	Yes		nn – The permittee does have an extension at this time
63.10(d)(5)	No	See 455(g) for malfunction reporting requirements	na- SSM reporting
63.10(e)(1)	Yes		CMS reporting
63.10(e)(2)(i)	Yes		
63.10(e)(2)(ii)	No	Pertains to continuous opacity monitors that are not part of this standard.	na
63.10(e)(3)	Yes		
63.10(e)(4)	No	Pertains to continuous opacity monitors that are not part of this standard.	na
63.10(f)	Yes		nn - The permittee does not have a wavier
63.11	Yes		na – The permittee does not have a flare

Reference	Applies to Subpart S	Comment from 40 CFR 63 Subpart A	Title V Permit Cross Reference
63.12	Yes		na – requirements for state delegation
63.13	Yes		na
63.14 &15	Yes		nn

SUBPART MM NESHAP: CHEMICAL RECOVERY COMBUSTION SOURCES
NESHAP (PULP AND PAPER MACT II)

Table 9. Subpart MM Summary of General Requirements

Applicable Requirement	Condition Number	Pollutant/ Parameter	Monitoring Condition
40 CFR 63.861 40 CFR 63.2	51	Definitions	n/a
OAR 340-218-0200	52	Permit reopener	n/a
40 CFR 63.8(d)(2) and 63.8(d)(3)	53	CMS Quality Control Program	54
40 CFR 63.6(e)(3)	55	SSM Plan	n/a
40 CFR 63.8 and 63.10	56	Immediate Reporting	n/a
40 CFR 63.867(c)	57	Quarterly Reporting	n/a
40 CFR 63.10	58	Semi-annual Reporting	n/a

DEFINITIONS – SUBPART MM NESHAP

51. Definitions:

- 51.a. The terms used in the section(s) of this permit that are specifically intended to implement Subpart MM -- National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, 40 CFR 63.860 through 63.868, have the meaning given them in 40 CFR 63.861, Definitions. [40 CFR 63.861]
- 51.b. The terms used in the section(s) of this permit that are specifically intended to implement the NESHAP General Provisions, 40 CFR 63 Subpart A, have the meaning given them in 40 CFR 63.2, Definitions. [40 CFR 63.2]

PERMIT REOPENINGS

52. LRAPA may reopen this permit to insert new conditions or modify existing conditions when such reopening is necessary to revise conditions in this permit that are affected by any revisions to 40 CFR 63 Subparts A and/or MM. [OAR 340-218-0200]

CMS REQUIREMENTS APPLICABLE TO NESHAPS

53. **Applicable Requirement:**

The following requirements apply to the CMSs required in Conditions 66 and 67:

- 53.a. A CMS quality control program as required by 40 CFR 63.8(d)(2) must be developed by March 13, 2004. The CMS quality control procedures must be kept on record as required by 40 CFR 63.8(d)(3). [40 CFR 63.8(d)(2) and 63.8(d)(3)]
- 53.b. The permittee must keep the necessary parts for routine repairs of the affected CMS equipment readily available. [40 CFR 63.8(c)(1)(ii)]

CMS SSM Plan Requirements

- 53.c. The permittee must develop and implement a written startup, shutdown and malfunction plan for CMS as required by Condition 55. [40 CFR 63.8(c)(1)(iii)]
- 54. **Monitoring Requirement:** The permittee must keep records pertaining to the CMSs required in Conditions 66 and 67 as follows:
 - 54.a. All CMS calibration checks; [40 CFR 63.10(b)(2)(x)]
 - 54.b. All adjustments and maintenance performed on CMS; [40 CFR 63.10(b)(2)(xi)]
 - 54.c. The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks; [40 CFR 63.10(c)(5)]
 - 54.d. The nature of the repairs or adjustments to the CMS that was inoperative or out of control; and [40 CFR 63.10(c)(12)]
 - 54.e. All procedures that are part of the quality control program required by Condition 53. [40 CFR 63.10(c)(14)]

STARTUP, SHUTDOWN AND MALFUNCTION (SSM) PLAN

- 55. **Applicable Requirement:** Startup, shutdown, and malfunction plan (SSM Plan). [40 CFR 63.6(e)(3) and 40 CFR 63.866(a)]
 - 55.a. The permittee may:
 - 55.a.i. Develop a separate SSM plan to comply with this condition; or
 - 55.a.ii. Revise a previously existing SSM plan to address the requirements of this condition, provided that the requirements of Conditions 55.d and 55.e, which are specific to Subpart MM, are included in the plan.
 - 55.b. The permittee must develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the equipment identified in Condition 59 during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. The purpose of the startup, shutdown, and malfunction plan is described in 40 CFR 63.6(e)(3)(i). [40 CFR 63.6(e)(3)(i)]

SSM Plan Revisions

- 55.c. **SSM Plan Revisions** [40 CFR 63.6(e)(3)(viii)]
 - 55.c.i. The permittee may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source.
 - 55.c.ii. The permittee may make revisions to the startup, shutdown, and malfunction plan without prior approval by LRAPA. Each such revision to a startup, shutdown, and

malfunction plan must be reported in the semiannual report as required by Condition 56.

- 55.c.iii. If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the permittee developed the plan, the permittee must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment.
- 55.c.iv. In the event that the permittee makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the permittee has provided a written notice describing the revision to LRAPA.

SSM Requirements Unique to Subpart MM

- 55.d. The owner or operator must develop a written plan as described in §63.6(e)(3) that contains specific procedures for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in §63.6(e), the plan must include the following requirements [40 CFR 63.866(a)(1)]
 - 55.d.i. Procedures for responding to any process parameter level that is inconsistent with the level(s) established under Condition 70, including the procedures listed below.
 - 55.d.ii. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended. [40 CFR 63.866(a)(1)(i)]
 - 55.d.iii. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance. [40 CFR 63.866(a)(1)(ii)]
- 55.e. The startup, shutdown, and malfunction plan must include the schedules listed below. These requirements only apply to Subpart MM, and may go beyond other SSM Plan requirements. [40 CFR 63.866(a)(2)]
 - 55.e.i. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and [40 CFR 63.866(a)(2)(i)]
 - 55.e.ii. An inspection schedule for each continuous monitoring system required under Conditions 66 and 67 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning. [40 CFR 63.866(a)(2)(ii)]

REPORTING REQUIREMENTS FOR SUBPARTS A, S AND MM

Summary of SSM Reporting Requirements

<u>Actions are or are not consistent with SSM Plan</u>	<u>Exceedance</u>	<u>Startup or shutdown</u>	<u>Malfunction</u>
<u>If actions are consistent</u>	<u>Exceedance occurs</u>	<u>Report in semiannual SSM report (Condition. 58.d)</u>	<u>Report in semiannual SSM report (Condition. 58.d)</u>
<u>If actions are consistent</u>	<u>No exceedance</u>	<u>No reporting required</u>	<u>Report in semiannual SSM report (Condition. 58.d)</u>
<u>If actions are not consistent</u>	<u>Exceedance occurs</u>	<u>Report immediately by phone/fax, followed by letter (Condition 56)</u>	<u>Report immediately by phone/fax, followed by letter (Condition 56)</u>
<u>If actions are not consistent</u>	<u>No exceedance</u>	<u>No reporting required</u>	<u>Report immediately by phone/fax, followed by letter (Condition 56)</u>

REPORTING REQUIREMENTS FOR SUBPARTS A AND MM

Immediate Reporting

56. The permittee must provide reporting, as specified in this Condition, any time the conditions specified in Condition 56.a are met: [40 CFR 63.10(d)(5)(ii)]
- 56.a. Report if:
- 56.a.i. an action is taken during a startup or shutdown that caused the permittee to exceed any applicable emission limitation pertaining to Subparts S and MM and is not consistent with the procedures specified in the SSM plan; or
 - 56.a.ii. an action is taken during a malfunction that is not consistent with the procedures specified in the SSM plan.
- 56.b. This condition pertains to all aspects of the SSM Plan (e.g., processes, emission controls, and CMSs).
- 56.c. The report must be submitted by phone or fax within 2 working days after commencing actions inconsistent with the plan. For the purpose of this condition, working days are Monday through Friday, excluding holidays observed by LRAPA. This report must include a description of the actions taken that are not consistent with the SSM Plan.
- 56.d. The permittee must report the actions taken in a letter within seven (7) working days after commencing actions inconsistent with the plan. The letter must include the following information:

- 56.d.i. the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy,
- 56.d.ii. explain the circumstances of the event,
- 56.d.iii. state the reasons for not following the startup, shutdown, and malfunction plan, and
- 56.d.iv. describe all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions), and actions taken to minimize emissions in conformance with Sec. 63.6(e)(1)(i).

Quarterly Reporting

57. The permittee must report quarterly if measured parameters meet any of the conditions specified in Conditions 62, 63, 64, and 65. [40 CFR 63.867(c) and 63.10(c)]
- 57.a. This report must contain the information specified below:
- 57.a.i. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;
 - 57.a.ii. The nature and cause of any malfunction (if known);
 - 57.a.iii. The corrective action taken or preventive measures adopted;
 - 57.a.iv. The total process operating time during the reporting period;
 - 57.a.v. In order to satisfy the requirements of Conditions 57.a.ii and 57.a.iii and to avoid duplicative recordkeeping efforts, the permittee may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in Sec. 63.6(e), provided that such plan and records adequately address the requirements of Conditions 57.a.ii and 57.a.iii;
 - 57.a.vi. The number and duration of occurrences when the source had to take corrective action pursuant to Conditions 62 or 63; and
 - 57.a.vii. The number and duration of occurrences when the source violated a standard pursuant to Conditions 64 or 65.
- 57.b. Reporting excess emissions below the violation thresholds of Conditions 64 or 65 does not constitute a violation of the applicable standard. [40 CFR 63.867(c)]
- 57.c. The permittee may combine excess emissions and/or summary reports for the mill.
- 57.d. If required, quarterly reports must be submitted by the following dates:
- 57.d.i. First quarter report (January, February, March): ***Submit by May 15;***
 - 57.d.ii. Second quarter report (April, May, June): ***Submit with Title V semi-annual report;***
 - 57.d.iii. Third quarter report (July, August, September): ***Submit by November 15;*** and;
 - 57.d.iv. Fourth quarter report (October, November, December): ***Submit with Title V annual report.***

Semiannual Reporting

58. The permittee must submit semiannual SSM Reports, Summary Reports and (if required) Excess Emissions and Continuous Monitoring System Performance Reports in accordance with the following: [40 CFR 63.10(e)(3)]
- 58.a. If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the SSM Report and the Summary Report must be submitted, and the full

Excess Emissions and Continuous Monitoring System Performance Report need not be submitted unless required by LRAPA. [40 CFR 63.10(e)(3)(vii)]

- 58.b. If the total duration of excess emissions of process or control system parameter exceedances for the reporting period is one (1) percent or greater of the total operating time for the reporting period, or CMS downtime for the reporting period is five (5) percent or greater of the total operating time for the reporting period, then the SSM Report, the Summary Report and the Excess Emissions and Continuous Monitoring System Performance Report must be submitted. [40 CFR 63.10(e)(3)(viii)]
- 58.c. The semiannual reports required by this condition must be submitted by the same dates as the annual and semiannual reports required in the permittee's Title V permit. The semi-annual reports must be submitted to LRAPA and the EPA Regional office as specified in the Title V permit. [40 CFR 63.9(a)(4)(ii) and 63.10(a)(5)]

SSM Report

- 58.d. The SSM Report must contain the following information: [40 CFR 63.10(d)(5)(i)]
- 58.d.i. If no startups, shutdowns or malfunctions occurred during the reporting period, the report need only state that no startups, shutdowns or malfunctions occurred during the reporting period.
- 58.d.ii. If any startups, shutdowns (that caused the source to exceed any applicable emission limitation in Subpart MM) or malfunctions occurred during the reporting period, and actions taken are consistent with the SSM plan, the report must so state. In this case, the report must include:
- 58.d.ii.A. Actions taken during such startups, shutdowns or malfunctions shall be summarized in the report and may be done in checklist form; if actions taken are the same for each event, only one checklist is necessary.
- 58.d.ii.B. The report shall also include the number, duration and a brief description for each malfunction that occurred during the reporting period and which caused or may have caused any applicable emission limitation in Subparts MM to be exceeded
- 58.d.iii. If the SSM plan was revised during the reporting period, each revision must be reported and briefly described. If no revisions were made during the reporting period, the report must so state. [40 CFR 63.6(e)(3)(viii)]

Summary Report

- 58.e. The Summary Report must be entitled "Summary Report – Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance" and must contain the information specified below: [40 CFR 63.10(e)(3)(vi)]
- 58.e.i. The company name and address of the affected source; [40 CFR 63.10(e)(3)(vi) (A)]
- 58.e.ii. An identification of each hazardous air pollutant monitored at the affected source; [40 CFR 63.10(e)(3)(vi) (B)]
- 58.e.iii. The beginning and ending dates of the reporting period; [40 CFR 63.10(e)(3)(vi) (C)]
- 58.e.iv. A brief description of the process units; [40 CFR 63.10(e)(3)(vi) (D)]
- 58.e.v. The emission and operating parameter limitations specified in the relevant standard(s); [40 CFR 63.10(e)(3)(vi) (E)]
- 58.e.vi. The monitoring equipment manufacturer(s) and model number(s); [40 CFR 63.10(e)(3)(vi) (F)]
- 58.e.vii. When no exceedances of parameters specified in Conditions 62, 63, 64, and 65 have occurred during the reporting period (i.e., quarterly reports pursuant to Condition 57 were not required), the report must state that no excess emissions occurred during the reporting period: [40 CFR 63.867(c)(1)]

- 58.e.viii. The total operating time of the affected source during the reporting period; [40 CFR 63.10(e)(3)(vi) (H)]
- 58.e.ix. An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes; [40 CFR 63.10(e)(3)(vi)(I)]
- 58.e.x. A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes; [40 CFR 63.10(e)(3)(vi)(J)]
- 58.e.xi. A description of any changes in CMS, processes, or controls since the last reporting period; [40 CFR 63.10(e)(3)(vi) (K)]
- 58.e.xii. The name, title, and signature of the responsible official who is certifying the accuracy of the report; [40 CFR 63.10(e)(3)(vi) (L)] and
- 58.e.xiii. The date of the report. [40 CFR 63.10(e)(3)(vi) (M)]

Excess Emissions and Continuous Monitoring System Performance Report

- 58.f. If required by Condition 58.b, the Excess Emissions and Continuous Monitoring System Performance Report must include the following emissions information:
 - 58.f.i. For excess emissions and parameter monitoring exceedances that occur during startups, shutdowns and malfunctions of the affected source, report the specific identification (i.e., date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances; [40 CFR 63.10 (c)(7)]
 - 58.f.ii. For excess emissions and parameter monitoring exceedances that occur during periods other than startups, shutdowns and malfunctions of the affected source, report the specific identification (i.e., date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances; [40 CFR 63.10 (c)(8)]
 - 58.f.iii. An emission data summary (or similar summary if the permittee monitors control system parameters), including: [40 CFR 63.10(e)(3)(vi) (I)]
 - 58.f.iii.A. The total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases),
 - 58.f.iii.B. The total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and
 - 58.f.iii.C. A breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- 58.g. If required by Condition 58.b, the Excess Emissions and Continuous Monitoring System Performance Report must include the following information on CMS performance:
 - 58.g.i. The date and time identifying each period in which the CMS was inoperative except for zero (low-level) and high-level checks; [40 CFR 63.10(c)(5)]

- 58.g.ii. The date and time identifying each period during which the CMS was out of control, as defined in 40 CFR 63.8(c)(7), and descriptions of corrective actions taken; [40 CFR 63.10(c)(6) and 63.8(c)(8)]
- 58.g.iii. A CMS performance summary (or similar summary if the permittee monitors control system parameters), including: [40 CFR 63.10(e)(3)(vi)(J)]
- 58.g.iii.A. The total CMS downtime during the reporting period (recorded in hours),
- 58.g.iii.B. The total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and
- 58.g.iii.C. A breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

SUBPART MM REQUIREMENTS

Table 10. Subpart MM Summary of Applicable Requirements

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Averaging Time	Monitoring Condition
40 CFR Part 63, Subpart MM	59	List of affected units	See Condition 59	n/a	n/a
OAR 340-218-0140(1)	60	Alternative Operating Scenarios	See Condition 60	n/a	n/a
40 CFR 63.862(a)	61	PM HAP	See Condition 61	n/a	66, 67
40 CFR 63.864(c)	62	Corrective Action, units with ESPs	See Condition 62	n/a	66, 67
40 CFR 63.864(c)	63	Corrective Action, units with scrubbers	See Condition 63	3 hr average	66, 67
40 CFR 63.864(c)	64	Violation of the Standard, units with ESPs	See Condition 64	n/a	66, 67
40 CFR 63.864(c)	65	Violation of the Standard, units with scrubbers	See Condition 65	n/a	66, 67
40 CFR 63.864(b)	70	Establishing and Revising Operating Parameter Ranges	See Condition 70	n/a	71

59. This condition lists the equipment that is subject to the 40 CFR Part 63, Subpart MM requirements in this permit. [40 CFR Part 63, Subpart MM]

Table 11. Subpart MM Affected Emission Units

Name	Device Number
No. 3 Recovery Furnace	(EU-445A)
No. 4 Recovery Furnace	(EU-445C)
No. 3 Recovery DTV East/West	(EU-445B)
No. 4 Recovery DTV	(EU-445D)
Lime Kilns	(EU-455)

Alternative Operating Scenarios

60. The permittee has requested only one operating scenario for Subpart MM. An alternative operating scenario for Subpart MM bubbling is applicable on request by the permittee and can be added to the permit through the appropriate modification process to provide the overall permit standards based on the federal requirements. [40CFR 63.862(a)(ii)(A)]

Standard

61. **Applicable Requirement**: The permittee must comply with the requirements of Condition 61.a. [40 CFR 63.863 and 63.862(a)(1)]
- 61.a. The permittee must comply with the PM emissions limits below: [40 CFR 63.862(a)(1)(i)]
- 61.a.i. ***For each existing kraft recovery furnace (EU-445A and EU-445C)***, the concentration of PM in the exhaust gases discharged to the atmosphere must be less than or equal to 0.10 gram per dry standard cubic meter (g/dscm) (0.044 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen; [40 CFR 63.862(a)(1)(i)(A)]
- 61.a.ii. ***For each existing kraft smelt dissolving tank (EU-445B and EU-445D)***, the concentration of PM in the exhaust gases discharged to the atmosphere must be less than or equal to 0.10 kg/Mg (0.20 lb/ton) of black liquor solids fired; [40 CFR 63.862(a)(1)(i)(B)]
- 61.a.iii. ***For each existing kraft lime kiln (EU-455)***, the concentration of PM in the exhaust gases discharged to the atmosphere must be less than or equal to 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen. [40 CFR 63.862(a)(1)(i)(C)]
- 61.a.iv. Particulate matter (PM) means total particulate matter (front half catch) as measured by EPA Method 5, EPA Method 17 (§63.865(b)(1)), or EPA Method 29 (40 CFR part 60, appendix A). **NOTE:** Method 17 in Appendix A of 40 CFR part 60 may be used in lieu of Method 5 or Method 29 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17, and the stack temperature is no greater than 205 °C (400 °F). See 40 CFR 63.865(b)(1). [40 CFR 63.861]

CORRECTIVE ACTION REQUIREMENT

Kraft Recovery Furnace Or Lime Kiln Equipped With an ESP (EU-445A, EU-445C, and EU-455)

62. Applicable Requirement: The permittee is required to implement corrective action for any kraft recovery furnace or lime kiln equipped with an ESP when the average of ten (10) consecutive 6-minute averages results in a measurement greater than 20 percent opacity. [40 CFR 63.864(k)(1) and 40 CFR 63.864(k)(1)(i)]

See Condition 57 for reporting requirements when exceedances occur.

Smelt Dissolving Tank Equipped With A Wet Scrubber (EU-445B and EU-445D)

63. Applicable Requirement: The permittee is required to implement corrective action for any kraft smelt dissolving tank equipped with a wet scrubber, when any 3-hour block average parameter value is outside the range of values established pursuant to Condition 70. [40 CFR 63.864(k)(1) and 40 CFR 63.864(k)(1)(ii)]

See Condition 57 for reporting requirements when exceedances occur.

Violation of the Standard

64. Applicable Requirement: The permittee is in violation of this permit and the standards of 40 CFR 63.862 if the monitoring exceedances below occur: [40 CFR 63.864(k)(2)]
- 64.a. For each existing kraft recovery furnace equipped with an ESP, when opacity is greater than 35 percent for 6 percent or more of the operating time within any quarterly period; or [40 CFR 63.864(k)(2)(i)]
 - 64.b. For each existing lime kiln equipped with an ESP, when opacity is greater than 20 percent for six (6) percent or more of the operating time within any quarterly period. [40 CFR 63.864(k)(2)(ii)]
 - 64.c. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the permittee reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to LRAPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in Condition 55), review of operation and maintenance records, and inspection of the source.: [40 CFR 63.6(e)(1)(i),(ii) and (iii)]
 - 64.c.i. Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the permittee shall comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.
 - 64.c.ii. Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

See Condition 57 for reporting requirements when exceedances occur.

65. Applicable Requirement: The permittee is in violation of this permit and the standards of 40 CFR 63.862 if any affected unit accumulates six (6) or more “unit-exceedance-days” within any 6-month reporting period. [40 CFR 63.864(k)(2), 63.864(k)(2)(iii), and 63.864(k)(3)]
- 65.a. For the purpose of this condition and related monitoring and recordkeeping conditions, the following terms are defined:
- 65.a.i. A “unit-exceedance-day” is any 24-hour period during which one (1) or more non-opacity monitoring exceedance(s) occur(s) at a specific affected unit.
- 65.a.ii. A “non-opacity monitoring exceedance” occurs whenever a 3-hour block average parameter value for either scrubber pressure drop or liquid flow rate is outside the range established pursuant to Condition 70.
- 65.a.iii. The non-opacity emission standards in Condition 65 shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in 40 CFR 63 Subpart MM. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in Condition 65, then that emission point shall still be required to comply with the non-opacity emission standards and other applicable requirements. [40 CFR 63.6(f)(1)]
- 65.a.iv. “Affected units” are each new or existing kraft recovery furnace, kraft smelt dissolving tank, kraft lime kiln or sulfite combustion unit equipped with a wet scrubber.
- 65.b. Unit-exceedance-days are counted separately for each affected unit.
- 65.c. A violation occurs when an individual affected unit accumulates six (6) or more unit-exceedance-days within any 6-month reporting period.
- 65.d. A separate violation of the standard occurs for each affected unit that accumulates six (6) or more unit-exceedance-days within any 6-month reporting period.
- See Condition 57 for reporting requirements when exceedances occur.

Monitoring Of Units With ESPs

66. Monitoring Requirement: For each emissions unit listed in this Condition, the permittee must install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) that can be used to determine opacity in accordance with the following: [40 CFR 63.864(d) and OAR 340-218-0050(3)(a)]
- 66.a. The emissions units subject to this condition are:
- 66.a.i. Kraft Recovery Furnace equipped with an ESP (EU-445A and EU-445C), and
- 66.a.ii. Kraft Lime Kiln equipped with an ESP (EU455).
- 66.b. The COMS must be installed, operational and data verified either prior to or in conjunction with conducting the initial performance test(s). [40 CFR 63.8(c)(3)]
- 66.c. Each COMS must be installed, operated, and maintained according to Performance Specification 1 of 40CFR part 60, appendix B. [40 CFR 864(d)(1)]
- 66.d. A performance evaluation of each COMS must be conducted according to the requirements in Sec. 63.8 and according to Performance Specification 1 of 40 CFR part 60, appendix B. [40 CFR 864(d)(2)]
- 66.e. The COMS zero and upscale calibration drift must not exceed two (2) percent opacity over a 24-hour period. [40 CFR Part 60, Appendix B, PS-1]
- 66.e.i. A COMS is out of control if the calibration drift exceeds two times the calibration drift in Condition 66.e. [40 CFR 63.8(c)(7)]
- 66.e.ii. In the event a COMS is out of control, the permittee shall: [40 CFR 63.8(c)(7)]

- 66.e.ii.A. Take corrective action and repeat all tests that indicate the COMS is out of control;
 - 66.e.ii.B. Repeat corrective action and retesting if necessary until the performance requirements are below the limits in Condition 66.e; and
 - 66.e.ii.C. Not use any data recorded during the out of control period in data averages and calculations.
- 66.f. Except during periods when calibration, quality assurance or maintenance are being performed, opacity must be monitored at least once every 10 seconds at equally spaced intervals, and successive 6-minute average opacities must be calculated. [40 CFR 63.8(c)(4)(ii) and 40 CFR 63.8(g)(2)]
- 66.g. Minimum procedures for COMS must include, at least once each calendar quarter, a method for producing a simulated zero opacity condition and an upscale (high-level) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures must provide a system check of all the analyzer's internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly normally used in the measurement of opacity. [40 CFR 63.8(c)(5)]
- 66.h. COMS data must be continuously recorded
- 66.i. Recordkeeping: The permittee must record the following: [OAR 340-218-0050(3)(b)]
- 66.i.i. Each 6-minute average opacity;
 - 66.i.ii. All periods when the average of ten (10) consecutive 6-minute averages result in a measurement greater than 20 percent opacity;
 - 66.i.iii. Any occurrence when corrective action is required pursuant to Conditions 62 or 63 including: [40 CFR 63.866(b)]
 - 66.i.iii.A. The time the deviation occurred;
 - 66.i.iii.B. The time corrective action was initiated and completed; and
 - 66.i.iii.C. The corrective action taken. [40 CFR 63.866(c)(3)]
 - 66.i.iv. For existing Kraft Recovery Furnaces, the percentage of operating time within each calendar quarter when opacity is greater than 35 percent;
 - 66.i.v. For each new Kraft Recovery Furnace or new or existing Lime Kiln equipped with an ESP, the percentage of operating time within each calendar quarter when opacity is greater than 20 percent;
 - 66.i.vi. Any violation pursuant to Conditions 64 or 65; [40 CFR 63.866(b)]
 - 66.i.vii. Records of black liquor solids firing rates in units of megagrams/day or pounds/day for all recovery furnaces and semichemical combustion units; [40 CFR 63.866(c)(1)]
 - 66.i.viii. Records of CaO production rates in units of megagrams/day or tons/day for all lime kilns; [40 CFR 63.866(c)(2)]

Subpart A Recordkeeping

- 66.i.ix. Operating time of each affected unit in each calendar quarter; [40 CFR 63.10(c)(13)]
- 66.i.x. The occurrence and duration of each startup, shutdown or malfunction; [40 CFR 63.10(b)(2)(i)];
- 66.i.xi. The occurrence and duration of each malfunction of air pollution control and monitoring equipment; [40 CFR 63.10(b)(2)(ii)];
- 66.i.xii. All required maintenance performed on the air pollution control equipment; [40 CFR 63.10(b)(2)(iii)];
- 66.i.xiii. The occurrence and during of all out of control periods of COMS; [40 CFR 63.8(c)(8)];
- 66.i.xiv. All actions taken to correct an out of control COMS; [40 CFR 63.8(c)(8)];

When An Applicable Emission Limitation is Exceeded or Actions Are Different From SSM Plan

- 66.i.xv. Such source of actions taken during periods of startup or shutdown when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)); or [40 CFR 63.10(b)(2)(iv)]
- 66.i.xvi. Actions taken during periods of malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)); [40 CFR 63.10(b)(2)(iv)]

When Actions Conform To SSM Plan

- 66.i.xvii. All information necessary, including actions taken, to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction plan (see §63.6(e)(3)) when all actions taken during periods of startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards) and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist", or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events); [40 CFR 63.10(b)(2)(v)]
- 66.i.xviii. The date and time of commencement and completion of each period of excess emissions and parameter monitoring exceedences that occur during startup, shutdown or malfunction of the affected source; [40 CFR 63.10(c)(7)]
- 66.i.xix. The date and time of commencement and completion of each period of excess emissions and parameter monitoring exceedences that occurs during periods other than startup, shutdown or malfunction of the affected source; [40 CFR 63.10(c)(8)]
- 66.i.xx. The nature and cause of any malfunction (if known); [40 CFR 63.10(c)(10)]
- 66.i.xxi. The corrective action taken or preventive measures adopted; [40 CFR 63.10(c)(11)]
- 66.i.xxii. Each period in which a CMS is malfunctioning or inoperative; [40 CFR 63.10(b)(2)(vi)]
- 66.i.xxiii. All required measurements needed to demonstrate compliance with a relevant standard, as required in the relevant monitoring condition(s); [40 CFR 63.10(b)(2)(vii)]
- 66.i.xxiv. All CMS recordkeeping required by Condition 54; and
- 66.i.xxv. All required CMS measurements. [40 CFR 63.10(c)(1)]

Monitoring Of Units With Scrubbers

- 67. **Monitoring Requirement:** For each emissions unit listed in this condition, the permittee must install, calibrate, maintain, and operate a continuous monitoring system (CMS) or systems that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate in accordance with the following: [40 CFR 63.864(e) and OAR 340-218-0050(3)(a)]
 - 67.a. The emissions units subject to this condition are:
 - 67.a.i. Kraft Smelt Dissolving Tank equipped with a wet scrubber.
 - 67.b. The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber must be certified by the manufacturer to be accurate to within a gage pressure of ± 500 pascals (± 2 inches of water gage pressure); and [40 CFR 63.864(e)(10)(i)]

- 67.c. The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within ± 5 percent of the design scrubbing liquid flow rate. [40 CFR 63.864(e)(10)(ii)]
- 67.d. The CMS(s) must be installed, operational and the data verified either prior to or in conjunction with conducting the initial performance test. [40 CFR 63.8(c)(3)]
- 67.e. Except as specified below, pressure drop across the scrubber and the scrubbing liquid flow rate must be monitored at least once every 15 minutes at equally spaced intervals, or as an arithmetic or integrated 1-hour average of CMS data: [40 CFR 63.8(c)(4)(ii) and 40 CFR 63.8(g)(2)]
 - 67.e.i. During periods when calibration, quality assurance or maintenance are being performed, pressure drop across the scrubber and the scrubbing liquid flow rate must be monitored at least twice each hour, with each representing a 15 minute period. [40 CFR 63.8(g)(2)]
- 67.f. Pressure drop across the scrubber and the scrubbing liquid flow rate data must be reduced to hourly averages for every one-hour period. [40 CFR 63.8(g)(2)]
 - 67.f.i. A one-hour period means any 60-minute period commencing on the hour (or half hour). [40 CFR 63.2]
- 67.g. CMS data must be continuously recorded.
- 67.h. Recordkeeping: The permittee must record the following: [OAR 340-218-0050(3)(b)]
 - 67.h.i. Each 1-hour and 3-hour block average pressure drop across the scrubber;
 - 67.h.ii. Each 1-hour and 3-hour block average scrubbing liquid flow rate;
 - 67.h.iii. Any occurrence when corrective action is required under Conditions 62 or 63, including; [40 CFR 63.866(b)]
 - 67.h.iii.A. Any period when the operating parameter levels were inconsistent with the levels established pursuant to Condition 70, with a brief explanation of the cause of the deviation;
 - 67.h.iii.B. The time the deviation occurred;
 - 67.h.iii.C. The time corrective action was initiated and completed; and
 - 67.h.iii.D. The corrective action taken. [40 CFR 63.866(c)(3)]
 - 67.h.iv. For each new or existing kraft recovery furnace, kraft smelt dissolving tank or kraft lime kiln equipped with a wet scrubber:
 - 67.h.iv.A. Each occurrence when 3-hour block average parameter values are outside the range of values established pursuant to Condition 70; and
 - 67.h.iv.B. Each "unit-exceedance-day" pursuant to Condition 65; and
 - 67.h.iv.C. The number of "unit-exceedance-days" that occur within each 6-month reporting period.
 - 67.h.v. Any violation of Conditions 64 or 65; [40 CFR 63.866(b)]
 - 67.h.vi. Records of black liquor solids firing rates in units of megagrams/day or tons/day for all recovery furnaces and semichemical combustion units; [40 CFR 63.866(c)(1)]
 - 67.h.vii. Records of CaO production rates in units of megagrams/day or tons/day for all lime kilns; [40 CFR 63.866(c)(2)]

Subpart A Recordkeeping

- 67.h.viii. Operating time of each affected unit in each calendar quarter; [40 CFR 63.10(c)(13)]
- 67.h.ix. The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards; [40 CFR 63.10(b)(2)(i)]

- 67.h.x. The occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment; [40 CFR 63.10(b)(2)(ii)];
- 67.h.xi. All required maintenance performed on the air pollution control equipment. [40 CFR 63.10(b)(2)(iii)]

When Actions Are Different From SSM Plan

- 67.h.xii. Such source of actions taken during periods of startup or shutdown when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)); or [40 CFR 63.10(b)(2)(iv)]

When Actions Conform To SSM Plan

- 67.h.xiii. All information necessary, including actions taken, to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction plan (see §63.6(e)(3)) when all actions taken during periods of startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards) and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events); [40 CFR 63.10(b)(2)(v)]
- 67.h.xiv. The date and time of commencement and completion of each period of excess emissions and parameter monitoring exceedences that occur during startup, shutdown or malfunction of the affected source; [40 CFR 63.10(c)(7)]
- 67.h.xv. The date and time of commencement and completion of each period of excess emissions and parameter monitoring exceedences that occurs during periods other than startup, shutdown or malfunction of the affected source; [40 CFR 63.10(c)(8)]
- 67.h.xvi. The nature and cause of any malfunction (if known); [40 CFR 63.10(c)(10)]
- 67.h.xvii. The corrective action taken or preventive measures adopted; [40 CFR 63.10(c)(11)]
- 67.h.xviii. Each period in which a CMS is malfunctioning or inoperative (including out of control periods); [40 CFR 63.10(b)(2)(vi)]
- 67.h.xix. All required measurements needed to demonstrate compliance with a relevant standard, as required in the relevant monitoring condition(s); [40 CFR 63.10(b)(2)(vii)]
- 67.h.xx. All CMS recordkeeping required by Condition 54;
- 67.h.xxi. All required CMS measurements. [40 CFR 63.10(c)(1)]

ON-GOING SOURCE TESTING

- 68. **Applicable Requirement:** The permittee must conduct on-going testing of each emissions unit listed in Condition 59. Tests must be conducted in accordance with the requirements of this condition. [OAR 340-218-0050]
 - 68.a. Each emissions unit listed in Condition 59 must be source tested at least once each semi-annual reporting period.
 - 68.a.i. Source tests need not be conducted concurrently.
 - 68.a.ii. Source tests required by other Conditions in the Title V permit may be used to comply with this condition, provided that the requirements of this condition are also met.

- 68.a.iii. Source test plan submittals and reports must be in accordance with the source test requirements in the Title V permit.
 - 68.a.iv. CMS outputs must be recorded during all source tests used to comply with this condition.
 - 68.b. The testing required by this condition shall be for Particulate Matter (PM).
 - 68.c. Particulate matter (PM) means total particulate matter (front half catch) as measured by EPA Method 5, EPA Method 17 (§63.865(b)(1)), or EPA Method 29 (40 CFR part 60, appendix A). **NOTE:** Method 17 in appendix A of 40 CFR part 60 may be used in lieu of Method 5 or Method 29 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17, and the stack temperature is no greater than 205 °C (400 °F). See 40 CFR 63.865(b)(1). [40 CFR 63.861]
 - 68.d. To demonstrate compliance with Condition 61.a, the permittee must use the methods and procedures in 40 CFR 63.865(b). [40 CFR 63.865(b)]
69. **Monitoring Requirement:** The permittee must retain the following records of source tests and make them available upon request: [OAR 340-218-0050(3)(b)]
- 69.a. Source test results;
 - 69.b. Relevant CMS outputs during the source test, including COMS outputs if applicable;
 - 69.c. The relevant production rate during the source test (CaO production for lime kilns, black liquor solids firing rates for recovery furnaces and smelt dissolving tanks);
 - 69.d. Records and documentation of supporting calculations for compliance determinations made under 40 CFR 63.865(a) through (e). [40 CFR 63.866(c)(4)]

ESTABLISHING AND REVISING OPERATING PARAMETER VALUES

70. **Applicable Requirement:** The permittee must establish operating ranges for the emissions units and monitoring parameters in Condition 67 in accordance with the following:
- 70.a. During the initial performance test the permittee must establish operating ranges for the emissions units and monitoring parameters in Condition 67; [40 CFR 63.864(j)(1)]
 - 70.b. Operating parameter ranges must be established as follows:
 - 70.b.i. The minimum scrubber liquid flow rate must be no less than the lowest flow rate monitored during a test run that returned a compliant result.
 - 70.b.ii. The minimum pressure drop for venturi scrubbers must be no less than the lowest pressure drop monitored during a test run that returned a compliant result.
 - 70.b.iii. The minimum pressure drop for non-venturi scrubbers must be no less than one (1) standard deviations below the lowest pressure drop monitored during a test run that returned a compliant result. The standard deviation must be determined from all applicable test results that returned compliant results.
 - 70.c. The permittee may base operating ranges on values recorded during previous performance tests or conduct additional performance tests for the specific purpose of establishing operating ranges, provided that test data used to establish the operating ranges are or have been obtained using the test methods required in 40 CFR 63.865. The permittee must certify that all control techniques and processes have not been modified subsequent to the testing upon which the data used to establish the operating parameter ranges were obtained. [40 CFR 63.864(j)(2)]
 - 70.d. The permittee may establish expanded or replacement operating ranges for the emissions units and monitoring parameters in Condition 67 during subsequent performance tests using the test methods in 40 CFR 63.865. [40 CFR 63.864(j)(3)]
 - 70.e. The permittee must continuously monitor each parameter and determine the arithmetic average value of each parameter during each 3-run performance test. Multiple 3-run performance tests may be conducted to establish a range of parameter values. [40 CFR 63.864(j)(4)]

71. **Monitoring Requirement:** The permittee must retain the following records of each test used to create or revise operating parameter ranges and make them available upon request: [OAR 340-218-0050(3)(b)]
- 71.a. Source test results;
 - 71.b. Relevant CMS outputs during the source test;
 - 71.c. The relevant production rate during the source test (CaO production for lime kilns, black liquor solids firing rates for recovery furnaces and smelt dissolving tanks);
 - 71.d. Records and documentation of supporting calculations for compliance determinations made under 40 CFR 63.865(a) through (e); and [40 CFR 63.866(c)(4)]
 - 71.e. Records of monitoring parameter ranges established for each affected source or process unit. [40 CFR 63.866(c)(5)]

PERFORMANCE SOURCE TEST PROCEDURES

72. The permittee must follow the Performance Test procedures specified in this condition, unless otherwise approved in writing by LRAPA. [LRAPA 35-0130]
- 72.a. The permittee must conduct all testing in accordance with the ODEQ's *Source Sampling Manual*.
 - 72.b. Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test and within two (2) hours prior to the tests. Any operating adjustments made during a compliance source test, which are a result of consultation during the tests with source testing personnel, equipment vendors, or consultants, may render the source test invalid.
 - 72.c. All compliance source tests must be performed at 90 to 110 percent of the normal maximum operating rate. For purposes of this permit, the normal maximum operating rate is defined as the 90th percentile of the average daily operating rates during a 12-month period immediately preceding the source test.
 - 72.d. Each source test must consist of at least three (3) test runs and the emissions results must be reported as the arithmetic average of all valid test runs. For a source test to be accepted, there must be at least two (2) valid test runs.

Table 12. Subpart MM Cross Reference From Federal Rules To Permit Conditions

CFR	Condition No.	CFR	Condition No.
861	51, 68.c, 61.a.iv	864(d)	66
862a1	61	864(d)(1)	66.c
862a1i	61.a	864(d)(2)	66.d
		863(e)	67
862a1iA	61.a.i	864(e)(10)(i)	67.b
862a1iB	61.a.ii	864(e)(10)(ii)	67.c
862a1iC	61.a.iii	864(k)(1)	62, 63
862(a)(ii)(A)	60	864(k)(1)(i)	62
863	61	864(k)(1)(ii)	63
		864(k)(2)	64, 65
864a1	66	864(k)(2)(i)	64.a
864a2	67	864(k)(2)(ii)	64.b

CFR	Condition No.	CFR	Condition No.
864		864(k)(2)(iii)	65
		864(k)(3)	65
864a2i	67.b	63.865(b)	68.d
864a2ii	67.c	864(j)(1)	70.a
864b2i	70.a	864(j)(2)	70.c
864b2ii	70.c	864(j)(3)]	70.d
864b2iii	70.d	864(j)(4)]	70.e
864c1	62	865a	na
864c1i	62, 63	865b	Initial Performance Test Completed
		866(a)(1)(i)	55.d.ii
		866(a)(1)(ii)	55.d.iii
		866(a)(2)	55.e
		866(a)(2)(i)	55.e.i
		866(a)(2)(ii)	55.e.ii
		866b	66.i.iii, 67.h.iii, 67.h.v
864c1ii	63	866c1	66.i.vii, 67.h.vi
864c2	64, 65	866c2	66.i.viii, 67.h.vii
864c2i	64.a	866c3	66.i.iii.C, 67.h.iii.D
864c2ii	64.c.ii	866c4	Initial Performance Test Complete
864c2iii	65	866c5	71.e
864c3	65	867(c)	57, 57.b
		867(c)(i)	58.e.vii

EMISSION UNIT SPECIFIC EMISSION LIMITS, STANDARDS, AND MONITORING

RECOVERY FURNACE #3 (EU-445A)

Table 13. EU-445A Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
33-070-3.A(1)(a)	73	TRS	10 ppm daily arithmetic average	Continuous monitoring	81	Continuously
33-070-3.A(1)(a)	74	TRS	0.15 kg/metric ton pulp (0.30 lb/ton) daily arithmetic average	Recordkeeping	82	Daily
33-070-3.B(4)(a)(i), ACDP 3(b)	75	PM/PM ₁₀	1.0 kg/metric ton pulp (2.0 lbs/ton) daily arithmetic average	Periodic ST/ Recordkeeping	83, 84	Quarterly/ Daily
33-070-3.B(1)(b) & 33- 070-4., ACDP 3(b)	76	PM/PM ₁₀	0.15 g/dscm (0.07 gr/dscf) daily arithmetic average	Periodic ST/ Recordkeeping	83, 84	Quarterly/ Daily
33-070-3-B(1)(c)	77	Opacity	35% for 30 min in 180 min or 60 min in 24-hr period	COMS	85	Continuously
33-070-3. C	78	SO ₂	300 ppm, 3-h arithmetic average	Periodic ST/ Recordkeeping	86	Monthly
33-070-3.A(4)	79	Non- condensable gases (NCGs)	Alternative thermal oxidation device	Recordkeeping	126	Daily
42-0080 [formerly 34- 060(5)]	80	Fuel use	Use only BLS, NG, Distillate Fuel Oil, #6	Recordkeeping	87	Daily

73. The permittee shall not cause or allow the emission of total reduced sulfur in excess of 10 parts per million (ppm) from emissions unit EU-445A, as a daily arithmetic average (daa). Total reduced sulfur emissions shall be monitored in accordance with Condition 81. [LRAPA 33-070-3.A(1)(a)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
74. The permittee shall not cause or allow the emission of total reduced sulfur in excess of 0.15 kilogram/metric ton (0.30 pound/ton) of pulp production from emissions unit, EU-445A, as a daily arithmetic average (daa). Total reduced sulfur emissions shall be monitored in accordance with Condition 82. [LRAPA 33-070-3.A(1)(a)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
75. The permittee shall not cause or allow the emission of particulate matter in excess of 1.0 kilogram/metric ton (2.0 pounds/ton) of pulp production from emissions unit EU-445A, as a daily arithmetic average (daa). Particulate matter emissions shall be measured in accordance with Condition 83. [LRAPA 33-070-3(B)(4)(a)(i), and as modified in ACDP Condition 3(b)]

76. The permittee shall not cause or allow the emission of particulate matter in excess of 0.15 gram/dry standard cubic meter (0.07 grain/dry standard cubic foot) from emissions unit EU-445A, as a daily arithmetic average (daa). Particulate matter emissions shall be measured in accordance with Condition 83. [LRAPA 33-070-3.B(1)(b), 33-070-4., and as modified in ACDP Condition 3(b)]
77. The emissions of particulate matter from the combined stack for Recovery Furnaces #3 & #4 (EU-445A & EU-445C) shall not exceed 35% opacity for a period or periods aggregating more than 30 minutes in any 180 consecutive minutes or more than 60 minutes in any 24 consecutive hours, excluding uncombined water and excluding periods when the facility is not operating. Opacity shall be monitored in accordance with Condition 85. [LRAPA 33-070-3.B(1)(c) and 40 CFR 60.282(a)(ii)]
78. The permittee shall not cause or allow the emission of sulfur dioxide in excess of 300 parts per million by volume, as a 3-hour average, from emissions unit EU-445A, except when burning fuel oil. Sulfur dioxide emissions shall be measured in accordance with Condition 86. [LRAPA 33-070-3.C]
79. Utilization of EU-445A shall serve as an alternative for the required thermal oxidation of non-condensable gases (NCGs) in accordance with Conditions 115 and 116. Episodes of NCG venting shall be monitored in accordance with Condition 126. [LRAPA 33-070-3.A(4)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
80. The permittee shall combust only the following fuels: black liquor, natural gas, distillate fuel oils, and/or No. 6 fuel oil in the emission unit EU-445A. Fuel used shall be monitored in accordance with Condition 87. [LRAPA 42-0080, formerly 34-060]

Monitoring for Emissions Unit: Recovery Furnace #3, EU-445A

[OAR 340-218-0050(3)(a)]

81. The permittee shall monitor total reduced sulfur emissions, as H₂S, from emissions unit EU-445A by calibrating, maintaining, and recording the output of a continuous emissions monitoring system (CEMS) on monitoring point FA445-253, in accordance with ODEQ's *Continuous Monitoring Manual* for monitoring pertaining to Condition 73. [LRAPA 33-070-6.B(1)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
 - 81.a. Monitoring shall be continuous using a daily averaging period. The daily arithmetic average (daa) shall be calculated from 1-hour arithmetic averages, or equivalent method (e.g., one-minute averages.)
 - 81.b. The daily cumulative hours with concentrations greater than 10 ppm shall be recorded.
 - 81.c. TRS concentrations shall be corrected to 8% oxygen.
 - 81.d. The permittee shall install, calibrate, maintain, and record the output of a continuous monitoring system (CMS) in accordance with ODEQ's *Continuous Monitoring Manual* for measuring oxygen on emissions unit EU-445A at the same location as the TRS CEMS for monitoring pertaining to Condition 73.
 - 81.d.i. The permittee shall calculate the oxygen concentration as an hourly arithmetic average from the continuous monitoring system data.
 - 81.d.ii. The span of the CMS shall be set at 25 percent oxygen.
 - 81.d.iii. The permittee shall use the oxygen CMS to correct TRS data to 8% oxygen. The correction may be done on a real time basis or calculated and recorded on a daily basis 24-hour average oxygen concentrations of each operating day for the Recovery Furnace. These 24-hour averages shall correspond to the 24-hour average TRS concentrations measured under Condition 81.a and shall be determined as an arithmetic mean of the appropriate 24 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under Condition 81.
82. The permittee shall monitor total reduced sulfur emissions, as H₂S, from emissions unit EU-445A by calculating emissions in units of kilograms of TRS/metric ton of equivalent air dried pulp production for monitoring pertaining to Condition 74. [LRAPA 33-070-6.B, LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]

- 82.a. The permittee shall calculate emissions of total reduced sulfur by using the calibrated and O₂ corrected daily arithmetic average (daa) concentration obtained from the CEMS in Condition 81a, the stack flow rate obtained from the correlation required in Condition 82b, and the daily average equivalent ADMT production in Condition 82c .
- 82.b. The permittee may continue to use a correlation between the stack flow rate and the fuels firing rate (with the steam flow and fossil fuel correction as appropriate) from previous source test data. The stack flow rate calculated from this correlation may be used to calculate mass emission data from concentration data. ***The stack flow correlation shall be checked against new source test data by the end of each permit term***, when it is used in emission calculations.
- 82.c. The permittee shall calculate average daily equivalent ADMT production for each day in accordance with the following:
 - 82.c.i. Calculate a 3-month rolling ADMT or ODT production per weight of dry BLS burned by recording the air-dried pulp production and the amount of BLS burned on a monthly basis, updating the ratio each month.;
 - 82.c.ii. Monitor the mass of dry BLS burned per day;
 - 82.c.iii. Multiply the mass of dry BLS burned per day by the ratio of pulp tons per unit mass of dry BLS burned to obtain the average daily equivalent mass pulp production; and
 - 82.c.iv. For day-time periods when more than half the Recovery Furnace fuel BTUs in any discrete hourly time periods on a given day come from fossil fuel, the furnace equivalent mass pulp production may be calculated from the furnace equivalent total fuel BTUs per air-dried pulp production 3-month rolling average. To track the furnace BTU to pulp ratio, the permittee shall calculate the dry BLS burned per day assuming 5500 BTU per dry pound BLS per day on Recovery Furnace No. 3 and 5736 BTU per dry pound on Recovery Furnace No. 4, both on as fired basis. The BTU assumption for natural gas shall be 1020 BTU/scf and No. 6 fuel oil shall be 151,000 BTU/gallon. BTU assumptions may be changed provided LRAPA is given written notification.
- 83. The following procedures and test methods shall be used for certifying compliance with Conditions 75, 76, and 188 (PSEL emission factor verification) from emissions unit EU-445A at monitoring point CDP445-183: [LRAPA 33-070-6.C, 35-0120-3, and 42-0080-5]
 - 83.a. EPA Method 5 shall be used for measuring particulate matter emissions in accordance with the LRAPA 33-070(1), definition for “particulate matter” and monitoring pertaining to Conditions 75 and 76 at monitoring point CDP445-183;
 - 83.b. DEQ Method 5 shall be used for measuring particulate matter emissions in accordance with OAR 340-200-0020(65) to verify the emission factor for the PSEL as required in Condition 188 at monitoring point CDP445-183. The EPA and DEQ Method 5 test runs may be conducted simultaneously by using one (1) sample train;
 - 83.c. Particulate matter source testing shall be performed at least quarterly except that testing may be semi-annual when the preceding six (6) source tests for emissions unit EU-445A were less than 0.075 gram/dscm (0.033 gr/dscf). [LRAPA 33-070-6.C(4)]
 - 83.d. During each test, the permittee shall record the following information:
 - 83.d.i. Black liquor solids flow (gpm), black liquor solids (%), stack flow rate (dscfm), and oxygen concentration;
 - 83.d.ii. Six-minute average opacities as measured by the COMS required in Condition 85; and
 - 83.d.iii. Average daily equivalent pulp production (ADMT) shall be calculated in accordance with Condition 82.c.
 - 83.e. Source test reports prepared in accordance with the ODEQ’s *Source Sampling Manual* must be submitted to LRAPA within 60 days of completing any required source test, unless a different time period is approved in the source test plan submitted prior to the source test.

84. The permittee may continue to use (but is not required to use) a correlation between emissions unit EU-445A particulate matter emissions (front half, EPA Method 5, grain/dscf) and opacity using the following procedure for monitoring pertaining to Conditions: 75 and 76. The correlation may be done on the combined stack for emissions units EU-445A and EU445C pursuant to Conditions 84 and 99. The correlation may be used to track compliance with LRAPA 33-070-3.B.(1) on the combined stack of the recovery furnaces provided the monitoring requirements of Conditions 83 and 98 continue to be met. The correlation may be used for PSEL tracking provided it is modified to include the ODEQ Method 5 back half catch, and the monitoring required by Conditions 83 and 98 continue to be met. [LRAPA 35-0120 and 35-0210 formerly 34-060]
- 84.a. The results from a minimum of the five (5) previous source tests, grains per dry standard cubic foot, required by Condition 83 and the hourly average opacity for the same source test period required by Condition 85 shall be used in the correlation. The correlation equation shall be revised, as appropriate, and the data shall be provided to LRAPA in the semi-annual report following completion of the correlation revision. LRAPA, upon review of the data, may require that the correlation equation be updated.
85. The permittee shall monitor the combined stack opacity from emissions units EU-445A and EU-445C by calibrating, maintaining, and recording the output of a continuous opacity monitoring system (COMS) in accordance with ODEQ's *Continuous Monitoring Manual* for monitoring pertaining to Condition 77. [LRAPA 33-070-6.C(2)] and [40 CFR 60.284(a)(1) and 40 CFR 60.284(d)(ii)]
- 85.a. The 6-minute average combined stack opacity for emissions units EU-445A and EU-445C shall be calculated from the individual data collected at least once per 10-second period by the instrument and recorded for each 6-minute block period. [40 CFR 60.13(e)(1)]
- 85.b. The number of 6-minute averages in excess of 35% during any 180 consecutive minutes and during any 24 consecutive hour period and the 6-minute average opacity in excess of 35% shall be recorded.
- 85.c. The average hourly (clock hour) and the average daily opacities shall be calculated from the 6-minute opacities or alternatively from the real time data collected at least once per minute.
- 85.d. The permittee shall maintain an alarm that is triggered instantaneously when the opacity reaches 35%.
- 85.e. The permittee shall set the span of the system at 70 percent opacity. [40 CFR 60.284(a)(1)]
- 85.f. Insufficient data completeness, as defined in ODEQ's *Continuous Monitoring Manual*, excluding COMS downtime due to zero and span checks, performance audits, and routine monitor maintenance, will void that data period.
86. The permittee shall monitor sulfur dioxide emissions from Recovery Furnace, EU-445A, when not burning fuel oil by either using the total reduced sulfur continuous emissions monitoring system (CEMS) required in Condition 81 or by on a monthly basis conducting three (3) 1-hour source tests for monitoring pertaining to Condition 78 at monitoring point FA445- 253. [LRAPA 33-070-6.D]
- 86.a. Sulfur dioxide monitoring shall be done in accordance with ODEQ's *Continuous Monitoring Manual* if continuous emission monitors are used or in accordance with ODEQ's *Source Sampling Manual* if source tests are used.
- 86.b. When the total reduced sulfur CEM is used, the 3-hour average concentration shall be calculated from three (3) consecutive 1-hour arithmetic averages.
- 86.c. If the permittee chooses to utilize the total reduced sulfur CEMs to document compliance with the limit in Condition 78, rather than perform three (3) 1-hour source tests, the sulfur dioxide calculations need only be performed for one (1) continuous 3-hour period per month. [LRAPA 33-070(6)(D)]
- 86.d. Use of a dedicated SO₂ CEM analyzer as part of the TRS CEM sample train is not required; but may be used by the permittee, provided it meets the requirements of Conditions 86.a through 86.c.
- 86.e. SO₂ concentrations shall be corrected to 8% oxygen.

87. The permittee shall maintain daily and annual records of fuel usage in Recovery Furnace #3, EU-445A, for monitoring compliance with Condition 80. [LRAPA 35-0160, 42-0080 (formerly 34-070), OAR 340-218-0050(3)(a)]

RECOVERY FURNACE #4 (EU-445C)

Table 14. EU-445C Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
40 CFR 60.283(a)(2)	88	TRS	5 ppm by volume on a dry basis, corrected to 8% oxygen daily arithmetic average	Initial Performance Test/Continuous monitoring	96	Continuously
33-070-3.A(1)(b)	89	TRS	5ppm and 0.075 kg/metric ton pulp (0.15 lb/ton) daily arithmetic averages	Recordkeeping	97	Daily
33-070-3.B(4)(a)(i), ACDP 4(b)	90	PM/PM ₁₀	1.0 kg/metric ton pulp (2.0 lbs/ton) daily arithmetic average	Periodic ST/Recordkeeping	98, 99	Quarterly/ daily
33-070-3.B(4)(a)(ii) & 33-070-4., ACDP 4(b) and 40 CFR 60.282(a)(1)(i)	91	PM/PM ₁₀	0.10 g/dscm (0.044 gr/dscf) daily arithmetic average	Periodic ST/Recordkeeping	98, 99	Quarterly/ daily
33-070-3.B(1)(c) and 40 CFR 60.282(a)(1)(ii)	92	Opacity	For LRAPA Title 33: 35% for 30 min in 180 min or 60 min in 24-hr period For NSPS Subpart BB: all 6-minute average opacities that exceed 35% for 6% or more of the operating time in any quarter	COMS	100	Continuously
33-070-3.C	93	SO ₂	300 ppm, 3-hr arithmetic average	Periodic ST/Recordkeeping	101	Monthly
33-070-3.A(4)	94	Non-condensable gases (NCGs)	Alternative thermal oxidation device	Recordkeeping	136	Daily
42-0080 [formerly 34-060(5)]	95	Fuel use	Use only BLS, NG, Distillate Fuel Oils, #6	Recordkeeping	102	Daily

88. The permittee shall not cause or allow the emission of total reduced sulfur in excess of 5 parts per million (ppm) by volume on a dry basis, corrected to 8 percent oxygen from emissions unit EU-445C as a 12-hr average. Total reduced sulfur emissions shall be monitored in accordance with Condition 96. [40 CFR 60.283(2)]

89. The permittee shall not cause or allow the emission of total reduced sulfur in excess of 5ppm and 0.075 kilogram/metric ton (0.15 pound/ton) of pulp production from emissions unit EU-445C as daily arithmetic averages (daa's). Total reduced sulfur emissions shall be monitored in accordance with Condition 97. [LRAPA 33-070-3.A(1)(b)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
90. The permittee shall not cause or allow the emission of particulate matter in excess of 1.0 kilogram/metric ton (2.0 pounds/ton) of pulp production from emissions unit EU-445C as a daily arithmetic average (daa). Particulate matter emissions shall be measured in accordance with Condition 98. [LRAPA 33-070-3.B(4)(a)(i), and as modified in ACDP Condition 4(b)]
91. The permittee shall not cause or allow the emission of particulate matter in excess of 0.10 gram/dry standard cubic meter (0.044 grain/dry standard cubic foot) from emissions unit EU-445C as a daily arithmetic average (daa). Particulate matter emissions shall be measured in accordance with Condition 98. [LRAPA 33-070-3.B(1)(b), 33-070-4, and as modified in ACDP Condition 4(b)] and [40 CFR 60.282(1)(i)]
92. The emissions of particulate matter from the combined stack for Recovery Furnaces No. 3 and No. 4 (EU-445A & EU-445C) shall not exceed the limits cited in Condition 77. Opacity shall be monitored in accordance with Condition 100. [LRAPA 33-070-3.B(1)(c)] and [40 CFR 60.282(a)(ii)]
- 92.a. For the No. 4 Recovery Furnace NSPS Subpart BB reports required under 40 CFR 60.7(c) for NSPS Subpart BB opacity standards, ***the permittee shall report semiannually periods of excess emissions as follows:***
- 92.a.i. All 6-minute average opacities that exceed 35 percent. [40 CFR 60.284(d)(ii)]
- 92.b. LRAPA will not consider periods of excess emissions reported under Condition 92.a to be indicative of a violation of 40 CFR 60.11(d) provided that:
- 92.b.i. The percent total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions occur does not exceed six (6) percent for average opacities from EU-445C. [40 CFR 60.284(e)(1)(ii)]
- 92.b.ii. LRAPA determines that No. 4 Recovery and the No. 4 Recovery ESP is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions. [40 CFR 60.284(e)(2)]
- 92.c. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems required by Condition 100. [40 CFR 60.284(f)]
- 92.c.i. The COMs shall be operated in accordance with the applicable procedures under Performance Specifications 1, 3, and 5 of appendix B of 40 CFR Part 60. [40 CFR 60.284(f)(1)]
- 92.c.ii. Quarterly accuracy determinations and daily calibration drift test shall be performed in accordance with Procedure 1 of appendix F of 40 CFR Part 60. [40 CFR 60.284(f)(2)]
93. The permittee shall not cause or allow the emission of sulfur dioxide in excess of 300 parts per million by volume, as a 3-hour arithmetic average from emissions unit EU-445C except when burning fuel oil. Sulfur dioxide emissions shall be measured in accordance with Condition 101. [LRAPA 33-070-3.C]
94. Utilization of EU-445C shall serve as an alternative for the required thermal oxidation of non-condensable gases (NCGs) in accordance with Conditions 115 and 116. Episodes of NCG venting shall be monitored in accordance with Condition 126. [LRAPA 33-070-3.A(4)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
95. The permittee shall use only fuels including black liquor, natural gas, distillate fuel oils, and/or No. 6 fuel oil in the emission unit EU-445C. Fuel used shall be monitored in accordance with Condition 102. [LRAPA 35-0160, 42-0080 (formerly 34-070), OAR 340-218-0050(3)(a)]

Monitoring for Emissions Unit: Recovery Furnace #4, EU-445C

[OAR 340-218-0050(3)(a)]

96. The permittee shall monitor total reduced sulfur emissions, as H₂S, from emissions unit EU-445C by calibrating, maintaining, and recording the output of a continuous emissions monitoring system (CEMS) on monitoring point FA445-329, in accordance with ODEQ's *Continuous Monitoring Manual* for monitoring pertaining to Condition 88. [LRAPA 33-070-6-B(1)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan] and [40 CFR 60.283(a)(2) and 40 CFR 60.284]
- 96.a. Monitoring shall be continuous using a daily averaging period for monitoring related to LRAPA 33-070-6.B(1). The daily arithmetic average (daa) shall be calculated from 1-hour arithmetic averages or equivalent.
- 96.b. The permittee shall calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed for Condition 88. [40 CFR 60.284(c)(1)]
- 96.c. The daily cumulative minutes with concentrations greater than 5 ppm shall be recorded. [LRAPA 33-070-3.A(1)(b) and LRAPA 33-070-7.A]
- 96.d. TRS concentrations shall be corrected to 8% oxygen using the equation in 40 CFR 60.284(c)(3).
- 96.e. The span of the CEMs shall be set at a TRS concentration of 25 ppm. [40 CFR 60.284(a)(2)(i) requires 30ppm; LRAPA approved 25ppm at the request of the permittee for improved accuracy which is allowed by 40 CFR 60 Appendix B, Spec 2, 6.1.1.2]
- 96.f. For the purposes of reports required under 40 CFR 60.7(c), the **permittee shall report semiannually periods of excess emissions as follows:** [40 CFR 60.284(d)(1)(i)]
- 96.f.i. For emissions from EU-445C periods of excess emissions are:
- 96.f.i.A. All 12-hour averages of TRS concentrations above 5 ppm by volume.
- 96.g. LRAPA will not consider periods of excess emissions reported under Condition 96.f to be indicative of a violation of 40 CFR 60.11(d) provided that:
- 96.g.i. The percent total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions occur does not exceed one (1) percent for TRS emissions from EU-445C: and [40 CFR 60.284(e)(1)(i)]
- 96.g.ii. LRAPA determines that No. 4 Recovery and the No. 4 Recovery ESP is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions. [40 CFR 60.284(e)(2)]
- 96.h. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems required by Condition 96. [40 CFR 60.284(f)]
- 96.h.i. The CEMs shall be operated in accordance with the applicable procedures under Performance Specifications 1, 3, and 5 of appendix B of 40 CFR Part 60. [40 CFR 60.284(f)(1)]
- 96.h.ii. Quarterly accuracy determinations and daily calibration drift test shall be performed in accordance with Procedure 1 of Appendix F of 40 CFR Part 60. [40 CFR 60.284(f)(2)]
- 96.i. The permittee shall install, calibrate, maintain, and record the output of a continuous monitoring system (CMS) in accordance with ODEQ's *Continuous Monitoring Manual* for measuring oxygen on emissions unit EU-445A at the same location as the TRS CEMS for monitoring pertaining to Condition 88.
- 96.i.i. The permittee shall calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day. These 12-hour averages shall correspond to the 12-hour average TRS concentrations under Condition 96.a and shall be determined as an arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by the CMSs. [40 CFR 60.284(c)(2)]

- 96.i.ii. The span of the CMS shall be set at 25 percent oxygen. [40 CFR 60.284(a)(2)(ii)]
 - 96.i.iii. The permittee shall use the oxygen CMS to correct TRS data to 8% oxygen. The correction may be calculated and recorded on a real-time basis or calculated and recorded on a daily basis 24-hour average oxygen concentrations of each operating day for the recovery furnace. These 24-hour averages shall correspond to the 24-hour average TRS concentrations measured under Condition 96.a and shall be determined as an arithmetic mean of the appropriate 24 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under Condition 96. [40 CFR 60.284(c)(2)]
97. The permittee shall monitor total reduced sulfur emissions, as H₂S, from emissions unit EU-445C by calculating emissions in units of kilograms of TRS/metric ton of equivalent air-dried pulp production for monitoring pertaining to Condition 90. LRAPA 35-0120 and 35-0140 (formerly 34-070) LRAPA Enforceable only pending EPA approval of Section 111(d) Plan]
- 97.a. The permittee shall calculate emissions of total reduced sulfur by using the calibrated and O₂ corrected daily arithmetic average (daa) concentration obtained from the CEMS in Condition 96, the stack flow rate obtained from the correlation required in Condition 97.b, and the daily average equivalent ADMT production in Condition 97.c.
 - 97.b. The permittee may continue to use a correlation between the stack flow rate and the fuels firing rate (with the steam flow and fossil fuel correction, as appropriate) from previous source test data. The stack flow calculated from this correlation shall be checked against new source test data by the end of each permit term if it is used in emission calculations.
 - 97.c. The permittee shall calculate average daily equivalent ADMT or ODT production for each day in accordance with the following:
 - 97.c.i. Calculate a 3-month rolling pulp production per weight of dry BLS burned by recording the air-dried pulp production and the amount of BLS burned on a monthly basis, updating the ratio each month.
 - 97.c.ii. Monitor the mass of dry BLS burned per day.
 - 97.c.iii. Multiply the mass of dry BLS burned per day by the ratio of pulp tons per unit mass of dry BLS burned to obtain the average daily equivalent pulp production.
 - 97.c.iv. For day-time periods when more than half the Recovery Furnace fuel BTUs in any discrete hourly time periods on a given day come from fossil fuel, the furnace equivalent mass pulp production may be calculated from the furnace equivalent total fuel BTUs per air-dried pulp production 3-month rolling average. To track the furnace BTU to pulp ratio, the permittee shall calculate the dry BLS burned per day assuming 5736 BTU per dry pound BLS per day on Recovery Furnace No. 3 and 6150 BTU per dry pound BLS on Recovery Furnace No. 4. The BTU assumption for natural gas shall be 1020 BTU/scf and no. 6 fuel oil shall be 151,000 BTU/gallon. BTU assumptions may be changed provided LRAPA is given written notification.
98. The following procedures and test methods shall be used for certifying compliance with Conditions 90 and 91, (PSEL emission factor verification and NSPS Subpart BB initial performance test as required in 40 CFR 60.285(a)) from emissions unit EU-445C at monitoring point CDP445-480: [LRAPA 35-0160, 42-0080 (formerly 34-070), OAR 340-218-0050(3)(a)]
- 98.a. EPA Method 5 shall be used for measuring particulate matter emissions in accordance with LRAPA 33-070-1., Definition 9 for PM and monitoring pertaining to Conditions 90 and 91 and in accordance with 40 CFR 60.285(a) and (b)(1) for PM monitoring pertaining to Condition 91 at monitoring point CDP445-480. [40 CFR 60.285(a) and (b)(1)]
 - 98.b. DEQ Method 5 shall be used for measuring particulate matter emissions in accordance with OAR 340-200-0020 to verify the emission factor for the PSEL as required in Condition 187 at monitoring point CDP445-480. The EPA and DEQ Method 5 test runs may be conducted simultaneously by using one (1) sample train.

- 98.c. Particulate matter source testing shall be performed at least quarterly except that testing may be semi-annual when the preceding six (6) source tests for emissions unit EU-445C were less than 0.075 gram/dscm (0.033 gr/dscf). [LRAPA 33-070-6.C(4)]
- 98.d. During each test, the permittee shall record the following information:
 - 98.d.i. Black liquor solids flow (gpm), black liquor solids (%), stack flow rate (dscfm) and oxygen concentration;
 - 98.d.ii. Six-minute average opacities as measured by the COMS required in Condition 100;
 - 98.d.iii. Average daily equivalent pulp production (ADMT) shall be calculated in accordance with Condition 97.c; and
 - 98.d.iv. Recovery Furnace Electrostatic Precipitator, PCD 461-170, primary and secondary voltages.
- 98.e. Source test reports prepared in accordance with the ODEQ's *Source Sampling Manual* must be submitted to LRAPA within 60 days of completing any required source test, unless a different time period is approved in the source test plan submitted prior to the source test.
- 99. The permittee may continue to use (but is not required to use) a correlation between combined stack emissions including unit EU-445C particulate matter emissions and opacity as per Condition 84. [LRAPA 35-0120 and 35-0210 formerly 34-060]
- 100. The permittee shall monitor the combined stack opacity from emissions units EU-445A and EU-445C in accordance with Condition 85 for monitoring pertaining to Condition 92. [LRAPA 33-070-6.C(2)]
- 101. The permittee shall monitor sulfur dioxide emissions from recovery furnace EU-445C when not burning fuel oil by either using the total reduced sulfur continuous emissions monitoring system (CEMS) required in Condition 96 or by on a monthly basis conducting three (3) 1-hour source tests for monitoring pertaining to Condition 93 at monitoring point FA445-329. [LRAPA 33-070-6.D]
 - 101.a. Sulfur dioxide monitoring shall be done in accordance with ODEQ's *Continuous Monitoring Manual* if continuous emission monitors are used or in accordance with ODEQ's *Source Sampling Manual* if source tests are used.
 - 101.b. When the total reduced sulfur CEMs is used, the 3-hour average concentration shall be calculated at least once each month from three (3) consecutive 1-hour arithmetic averages.
 - 101.c. Use of a dedicated SO₂ CEM analyzer as part of the TRS CEM sample train is not required but may be used by the permittee, provided it meets the requirements of Conditions 101.a through 101.b.
 - 101.d. SO₂ concentrations shall be corrected to 8% oxygen. SO₂ monitoring periods shall be in 3 hour blocks (e.g. 7:30-10:30, etc).
- 102. The permittee shall maintain daily and annual records of fuel usage burned in Recovery Furnace #4, EU-445C, for monitoring compliance with Condition 95. [LRAPA 35-0160, 42-0080 (formerly 34-070), OAR 340-218-0050(3)(a)]

General NSPS Subpart A Requirements for NSPS Subpart BB

- 103. The permittee shall submit a notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date. [40 CFR 60.7(a)(5)]
- 104. The permittee shall maintain records of SSM events as required by 40 CFR 60.7(b). [40 CFR 60.7(b)]
- 105. The permittee shall submit excess emission reports as required by Conditions 92.a and 96.f and 40 CFR 60.7(c) and 40 CFR(c)(1-4). [40 CFR 60.7(c)]

106. The report required by Condition 105 shall contain the information and be in the format shown in figure 1 of 40 CFR 60.7 and also contain the information as required by 40 CFR 60.7(d)(1) and 40 CFR 60.7(d)(2) unless otherwise specified by LRAPA. [40 CFR 60.7(d)]
107. For a period of two (2) years, the permittee shall maintain records as required in 40 CFR 60.7(f), 40 CFR 60.7(f)(1) and (2). [40 CFR 60.7(f)]
108. For the performance tests required by Condition 98 the permittee shall follow the applicable performance test requirements as specified in 40 CFR 60.8. [40 CFR 60.8]
109. The permittee shall follow the compliance with standards and maintenance requirements as applicable in 40 CFR 60.11. [40 CFR 60.11]
110. The permittee shall follow the applicable monitoring requirements as specified in 40 CFR 60.13. [40 CFR 60.13]
111. The permittee shall follow the applicable general control device requirements as specified in 40 CFR 60.18. [40 CFR 60.18]
112. The permittee shall follow the applicable general notification and reporting requirements as specified in 40 CFR 60.19. [40 CFR 60.19]

LIME KILNS No. 2 and No. 3, EMISSIONS UNIT EU-455

Table 15. EU-455 Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
33-070-3.A(2)	113	TRS	20 ppm daily arithmetic average	Continuous Monitoring	124	Continuously
33-070-3.A(2)	114	TRS	0.05 kg/metric ton pulp (0.10 lb/ton) daily arithmetic average	Recordkeeping	125	Daily
33-070-3.A(4)	115	Non-condensable gases	Controlled	Recordkeeping	126	Daily
33-070-3.A(4)	116	Non-condensable gases	650°C (1,200°F) for 0.3 second	Recordkeeping	126	Daily
ACDP Condition 14	117	S-MeOH-H ₂ O Mixture	650°C (1,200°F) for 0.3 second	Recordkeeping	126	Daily
33-070-3.B(2)(a) & ACDP Condition 5b	118	PM/PM ₁₀	0.38 kg/metric ton pulp (0.75 lb/ton) daily arithmetic average	Periodic ST/Continuous Monitoring	127, 129	Semi-annual/Continuously
40 CFR 63.862(a)(1)(i)(C)	119	PM/PM ₁₀	0.15 g/dscm (0.064 gr/dscf) daily arithmetic average	Periodic ST/Continuous Monitoring	127, 129	Semi-annual/Continuously
32-010-1.B & 33-070-3.D	120	Opacity	20% 3 minutes in 60 minutes	Periodic ST	129	Continuously/ Monthly -- in accordance with Conditions 130 and 131
42-0080 [formerly 34-060(5)]	121	Fuel use	Use only NG, fuel oils, MeOH, Turpentine, and Petroleum Coke	Recordkeeping	128	Daily
32-007	122	Opacity	See Condition 129	Continuous Parameter Monitoring	129	Continuously/ Weekly -- if Continuous Opacity Indicator is down

113. The permittee shall not cause or allow the emission of total reduced sulfur in excess of 20 parts per million (ppm) from emissions unit EU-455, as a daily arithmetic average (daa). Total reduced sulfur emissions shall be monitored in accordance with Condition 124. [LRAPA 33-070-3.A(2)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
114. The permittee shall not cause or allow the emission of total reduced sulfur in excess of 0.05 kilogram/metric ton (0.10 pound/ton) of production from emissions unit EU-455, as a daily arithmetic average (daa). Total reduced sulfur emissions shall be monitored in accordance with Condition 125. [LRAPA 33-070-3.A(2)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
 - 114.a. The limit in Condition 114 does not apply when EU-455 is not thermally converting calcium carbonate to calcium oxide. [LRAPA 33-070-1 definition of "lime kiln"]
115. Non-condensibles from digesters, multiple-effect evaporators, and contaminated condensate stripping shall be continuously treated to destroy TRS gases by thermal oxidation in a lime kiln or recovery furnace by subjecting the non-condensibles to a temperature of not less than 1200°F for not less than 0.3 seconds, in accordance with LRAPA 33-070-3.A.(4) and 40 CFR 63.443. The vent gases shall be continuously treated by thermal oxidation in either emissions unit EU-445A, EU-445C, or EU-455 in accordance with LRAPA 33-070-3.A.(4) and 40 CFR 63.443. NCGs from the MACT 2001 vents (defined in Condition 24.h) shall be included in the NCG or parallel vent collection systems no later than April 16, 2001, in accordance with 40 CFR 63.443. Episodes of NCG systems venting shall be monitored in accordance with Condition 126, Condition 42.i.iv and Condition 44. [LRAPA 33-070-3.A(4) and 40 CFR 63.443]
116. In the event that Lime Kiln #2 or #3, EU-455, fails or is removed from service, the efficient thermal oxidation of non-condensibles shall be transferred to the alternate Lime Kiln #2 or #3 or alternate thermal oxidation units EU-445A or EU-445C. Lime Kilns #2 and #3, or EU-445A or EU-445C, shall serve as alternative devices for each other, and per 40 CFR 64.443(d)(4)(i) are listed as devices capable of meeting the thermal oxidation requirement within this permit condition. Also, any of the above thermal oxidation devices may be chosen and utilized as the primary thermal oxidation device, with any of the other units being used as alternatives when the primary device is incapable of performing the necessary thermal oxidation of NCGs. [LRAPA 33-070-3.A(4)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
 - 116.a. Emissions units EU-445A, EU-445C, and EU-455 shall be maintained at a temperature not less than 650°C (1,200°F) during NCG thermal oxidation.
 - 116.b. The residence time for NCG thermal oxidation in emissions units EU-445A, EU-445C and EU-455 shall be at least 0.3 second.
 - 116.c. The venting of non-condensibles during changeover to alternative devices (Kiln #2 or #3, EU-445A or EU-445C) shall be minimized, but in no case shall the time exceed one (1) hour per changeover.
117. The permittee shall subject foul condensate steam stripper product methanol, which may be thermally oxidized as supplemental fuel in EU-455, to a temperature of not less than 650°C (1,200°F) for not less than 0.3 seconds to thermally oxidize TRS gases and other organics. If Lime Kilns #2 & #3 of emission unit EU-455 are both down, venting of product methanol is prohibited, except as occurs through other permitted processes. [ACDP Condition 14]
118. The permittee shall not cause or allow the emission of particulate matter in excess of 0.38 kilogram/air dry metric ton (0.75 pound/ton) of production from emissions unit EU-455, as a daily arithmetic average (daa). Particulate matter emissions shall be measured in accordance with Condition 127. [LRAPA 33-070-3.B(2)(a) and as modified in ACDP Condition 5b]

119. The permittee shall not cause to be discharged into the atmosphere from EU-455, any gases which contain particulate matter in excess of 0.15 gram/dry standard cubic meter (0.064 grain/dry standard cubic foot), corrected to 10 percent oxygen, as a daily arithmetic average (daa). Particulate matter emissions shall be measured in accordance with Condition 127. [MACT II Subpart MM superceded LRAPA 33-070-3.B(2)(a) and as modified in ACDP Condition 5b as of March 13, 2004]
120. The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere from emissions unit EU-455 devices PS455-999 (Kilns) and the reburn elevators or petroleum coke storage and handling fugitive emissions to exceed an opacity equal to or greater than 20% for a period exceeding three (3) minutes in any one (1) hour, excluding uncombined water. Opacity shall be monitored in accordance with Condition 129 and 131. [LRAPA 32-010-1.B, 32-010-3. & 33-070-3.D.]
121. The permittee shall use only fuels including petroleum coke, natural gas, distillate, No. 6 fuel oil, used or reprocessed oil and/or blends of these oils, turpentine, and/or product methanol in the emission unit EU-455. [42-0080 (formerly 34-060(5))& ACDP Condition 5d]
122. In addition to the limits and standards in Conditions 113 through 121, the permittee shall take corrective action to return to highest and best practicable treatment and control if the Lime Kiln ESP, CD 456-110, opacity deviates from an acceptable range, as established by Conditions 127 and 129. [LRAPA 32-007]
 - 122.a. These deviations and the corrective actions shall be recorded in accordance with Condition 130. [LRAPA 32-007-B-2]
 - 122.b. The deviation from an action level shall not by itself be considered a violation of an emission standard in this permit. [LRAPA 32-007-2.D]
123. Use of a dedicated SO₂ CEM analyzer as part of the TRS CEM sample train is required as of March 24, 2006, with the addition of petroleum coke fuel to the permit for Kiln fuel; and it shall also be used by the permittee to monitor SO₂ emissions from Lime Kilns #2 and #3. The SO₂ CEM analyzer shall meet the CGA (cylinder gas audit) and RATA (relative accuracy test audit) requirements in the Oregon CEM manual. [LRAPA 35-0210 and OAR 340-218-0050(3)(a)]

Monitoring for Emissions Unit: Lime Kilns No. 2 and No. 3, EU-455

[OAR 340-218-0050(3)(a)]

124. The permittee shall monitor total reduced sulfur emissions, as H₂S, from emissions unit EU-455 by calibrating, maintaining, and recording the output of a CEMS on monitoring point CDP456-110 in accordance with ODEQ's *Continuous Monitoring Manual* for monitoring pertaining to Condition 113. [LRAPA 33-070-6.B(2)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
 - 124.a. Monitoring shall be continuous using a daily averaging period. The daily arithmetic average (daa) shall be calculated from 1-hour arithmetic averages.
 - 124.b. The daily cumulative minutes with concentrations greater than 20 ppm shall be recorded.
 - 124.c. TRS concentrations (ppm) shall be corrected to 10% oxygen.
 - 124.d. The permittee shall install, calibrate, maintain, and record the output of a continuous monitoring system (CMS) in accordance with ODEQ's *Continuous Monitoring Manual* for measuring oxygen on emissions unit EU-455 at the same location as the TRS CEMS for monitoring pertaining to Condition 113.
 - 124.d.i. The permittee shall calculate the oxygen concentration as an hourly arithmetic average from the continuous monitoring system data.
 - 124.d.ii. The span of the CMS shall be set at 25 percent oxygen.
 - 124.d.iii. The permittee shall use the oxygen CMS to correct TRS data to 10% oxygen. The correction may be calculated and recorded on a real time basis or calculated and recorded on a daily basis 24-hour average oxygen concentrations of each operating day for the Lime Kilns. These 24-hour averages shall correspond to the 24-hour average TRS concentrations measured under Condition 124.a and shall be determined as an

arithmetic mean of the appropriate 24 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under Condition 124.

125. The permittee shall monitor total reduced sulfur emissions, as H₂S, from emissions unit EU-455 by calculating emissions in units of kilograms of TRS/metric ton of equivalent air dried pulp production for monitoring pertaining to Condition 114. [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
- 125.a. The permittee shall calculate emissions of total reduced sulfur by using the calibrated and O₂ corrected daily arithmetic average (daa) concentration obtained from the CEMS in Condition 124, the stack flow rate obtained from the correlation required in Condition 125.b and the average daily equivalent ADMT production in Condition 125.c.
- 125.b. The permittee may continue to use the correlation between the stack flow rate and the type and amount of fuel(s) fired, and other contributing parameters to stack flow, from previous source test data. The stack flow correlation shall be updated with data from the source testing required in Condition 127 no later than the end of each permit term during which the correlation is used to estimate mass emission rates.
- 125.c. The permittee shall calculate average daily equivalent ADMT for each day in accordance with the following:
- 125.c.i. Use actual combined pulp production ODP from the Batch and Kamyr kraft processes (EU-410 and EU-420) for any days when both process each operate at least four (4) hours in a given day; or for any days when either kraft process is down for more than 16 hours in a given day the following alternative methods may be utilized;
- 125.c.ii. Calculate a 3-month rolling pulp mass production per amount of lime mud burned or total kiln fuel usage BTUs by recording the pulp production and the amount of lime mud burned or the total kiln fuel usage on a monthly basis, and updating the ratio on a 3-month rolling average each month.
- 125.c.iii. Monitor the amount of dry lime mud burned or total kiln fuel usage per day.
- 125.c.iv. Multiply the amount of dry lime mud burned or total kiln fuel usage per day (Condition 125.c.iii) by the ratio of pulp mass production per amount of lime mud burned or total kiln fuel heat input (Condition 125.c.i) to obtain the average daily equivalent pulp production.
126. The permittee shall maintain daily records of all periods of interruption of combustion of non-condensable gases in emission units EU-445A, EU-445C and/or EU-455 for monitoring compliance with Conditions 29.c, 79, 94, 115, 116, and 117 and NESHAPs Condition 44. [LRAPA 35-0160]
- 126.a. Records shall include all periods of non-condensable gas bypass, recorded in a log.
- 126.b. Any preventative or corrective action taken as a result of the switch over to Recovery Furnace #3 (EU-445A), Recovery Furnace #4 (EU-445C), Lime Kiln #2 (EU-455) or Lime Kiln #3 (EU-455) shall also be recorded in a log when the switchover is associated with periods of interruption of the combustion of non-condensable gases.
127. The following procedures and test methods shall be used for certifying compliance with Conditions 118, 119, and 186 (PSEL emission factor verification) from emissions unit EU-455 at monitoring point CDP456-110: [LRAPA 35-0160]
- 127.a. EPA Method 5 shall be used for measuring particulate matter emissions in accordance with OAR 340-234-0010(29) and monitoring pertaining to Conditions 118 and 119.
- 127.b. DEQ Method 5, in accordance with OAR 340-234-0010(29), shall be used to measure particulate matter emissions and to verify the emission factor for the PSEL as required in Condition 163 (PSEL emission factor verification). The EPA and DEQ Method 5 test runs may be conducted simultaneously by using one (1) sample train.
- 127.c. Particulate matter source testing shall be performed at least semi-annually. Source tests shall be separated by a minimum of three (3) months. [LRAPA 33-070-6.C(5)]

- 127.d. During each test, the permittee shall record the following information:
 - 127.d.i. Estimated lime mud burned and fuel type and amount in mmbtu;
 - 127.d.ii. Oxygen concentration;
 - 127.d.iii. ESP stack opacity; and
 - 127.d.iv. Average daily equivalent pulp production (ADMT) shall be calculated in accordance with Condition 125.c .
- 128. The permittee shall maintain daily and annual records of fuel usage burned in the Lime Kiln, EU-455, for monitoring compliance with Condition 121. [LRAPA 35-0160]
- 129. In order to form a basis for which to establish action levels for the lime kilns, the permittee shall install, calibrate, maintain, and operate the following for the Lime Kiln, EU-455, for monitoring pertaining to Condition 122 in accordance with the facility's established written operating instructions, which shall be approved in writing by LRAPA. This measurement shall not be subject to the ODEQ *Continuous Monitoring Manual*, including PS-1, unless the state rules are amended to require COMs on Kraft Mill Lime Kilns in the future. The permittee shall: [LRAPA 35-0160 and LRAPA 35-0210]
 - 129.a. Maintain a continuous opacity indicating system for the continuous measurement of opacity from the Lime Kiln ESP, CD 456-110;
 - 129.b. Maintain an alarm on the COMS that sounds when the instantaneous opacity reading reaches 20%; and
 - 129.c. Monitor visible opacity emissions monthly if the continuous opacity indicator is not in operation. Opacity shall be monitored in accordance with Condition 17
- 130. The permittee shall survey the EU-455 Lime Kiln combined stack using EPA Method 22 for any visible emissions once per month for monitoring pertaining to Condition 120. The Method 22 monitoring shall provide backup to the Condition 129.a Opacity Indicator monitoring and shall not be required if the Opacity Indicator is functional for 90% of the days per month. If visible emissions are observed by Method 22, or the Opacity Alarm sounds according to Condition 129.b, the permittee shall either take corrective action or conduct a modified EPA Method 9 test within 24 hours. Any testing shall be conducted in accordance with the ODEQ's *Source Sampling Manual* or the testing requirements in this permit. The permittee shall record the corrective action or the results of the modified EPA Method 9 tests. If visible opacity observations are conducted, opacity shall be monitored in accordance with Condition 17. [LRAPA 35-0160 and LRAPA 35-0210]
- 131. The permittee shall survey Reburn Elevator Devices GE-454-029 and GE454-068 and the petroleum coke storage and handling system using EPA Method 22 for any visible emissions once per month for monitoring pertaining to Condition 120. The Method 22 monitoring shall not be required on the Reburn Elevator Devices if DCS (Dust Collection System) is in operation. If visible emissions are observed by Method 22, the permittee shall either take corrective action or conduct a modified EPA Method 9 test within 24 hours. Any testing shall be conducted in accordance with the ODEQ's *Source Sampling Manual* or the testing requirements of this permit. The permittee shall record the corrective action or the results of the modified EPA Method 9 tests. The permittee shall record in a log the results of any corrective action taken and the results of any periodic inspections. Opacity shall be monitored in accordance with Condition 17. [LRAPA 35-0160 and LRAPA 35-0210]

SMELT DISSOLVING TANKS, EMISSIONS UNITS EU-445B & 445D

Table 16. EU-445B and EU445D Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
33-070-3.A(3)(b)	132	TRS	0.033 g/kg BLS (0.066 lb/ton BLS) daily arithmetic average	Periodic ST	136.a	Quarterly/ Semi-annual
33-070-3.B(3)(a)	133	PM/PM ₁₀	0.25 kg/metric ton pulp (0.50 lb/ton) daily arithmetic average	Periodic ST/ Continuous Parameter Monitoring	136.b, 137	Quarterly/ Semi-annual/ Continuously
32-010-1,3 33-070-3.B(3)(b)	134	Opacity	20% 3 minutes in 60 minutes	Continuous Parameter Monitoring	137	Continuously
32-007-2.D	135	Scrubber liquid flow rate	TBD see Condition 136g	Continuous Parameter Monitoring	137	Continuously

132. The permittee shall not cause or allow the emission of total reduced sulfur in excess of 0.033 gram/kilogram (0.066 pound/ton) black liquor solids from emissions units EU-445B and 445D, as a daily arithmetic average (daa). If the two (2) tank vents from the precipitator ash mix tank vent (device TA445-563), and the boiler and economizer ash mix tank vent (device TA445-333,) are vented to the No. 4 Recovery Smelt Dissolving Tank vent scrubber inlet, then the TRS emissions from these tanks are not applicable to the EU-275C or EU-275D Other Source TRS limit, *but are included* in the Smelt Dissolving Tank TRS limit for Condition 132. If these ash mix tank vents are vented to ambient (not normal operating condition), their TRS emissions are subject to the Other Source TRS limits for Condition 139. Total reduced sulfur emissions shall be measured in accordance with Condition 136.a. [LRAPA 33-070-3.A(3)(b)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
133. The permittee shall not cause or allow the emission of particulate matter in excess of 0.25 kilogram/metric ton (0.50 pound/ton) of production from emissions units EU-445B and 445D, as a daily arithmetic average (daa). Particulate matter emissions shall be measured in accordance with Condition 136.b. [LRAPA 33-070-3.B(3)(a)]
134. The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere from emissions units EU-445B and 445D for a period or periods aggregating more than three (3) minutes in any 1-hour which is equal to or greater than 20% opacity, excluding uncombined water. Compliance with this opacity standard shall be monitored in accordance with Condition 137. [LRAPA 32-010-1,3) & LRAPA 33-070-3.B(3)(b)]
135. In addition to the limits in Conditions 132 through 134, the permittee shall take corrective action to return to highest and best practicable treatment and control if the Smelt Dissolving Tank Scrubbers, CD 445-162, CD 445-164 and CD 445-447, 3-hour block average liquid flow, 3-hour block average liquid flow pH or 3-hour block average scrubber differential pressure deviates from an acceptable range. The acceptable ranges were determined by LRAPA and the permittee during the first Title V permit term [years 2000 – 2005] and previous Title V permit condition 107, and as of September 9, 2004 the acceptable ranges are as follows. [LRAPA 35-0160 and LRAPA 35-0210]
- 135.a. The scrubber minimum total liquid flow 3-hour block average is 50gpm, except for changes approved in writing by LRAPA which follow the procedure in Condition 136.e. [Title V Condition 64]

- 135.b. The scrubber minimum liquid flow 3-hour block average pH is 10.4, except for changes approved in writing by LRAPA which follow the procedure in Condition 136.e.
- 135.c. The scrubber minimum differential pressure 3-hour block average is 6.5 inches water pressure, except for changes approved in writing by LRAPA which follow the procedure in Condition 136.e. [Title V Condition 64]
- 135.d. These deviations and the corrective actions shall be recorded in accordance with Condition 137.
- 135.e. The deviation from an action level shall not by itself be considered a violation of an emission standard in this permit. [LRAPA 32-007-2.D]

Monitoring for Emissions Units: Smelt Dissolving Tank Vents, EU-445B and EU-445D
[OAR 340-218-0050(3)(a)]

- 136. The following procedures and test methods shall be used for certifying compliance with Conditions 132 and 133 from emissions units EU-445B and EU-445D at monitoring points CDP445-164 (#3 East DTV), CDP445-162 (#3 West DTV) and CDP445-164 (#4 DTV):
 - 136.a. EPA Methods 16, 16A, 16B or a 16A/6C hybrid for TRS, as H₂S, shall be used at least quarterly for monitoring pertaining to Condition 132 except that testing may be semi-annual when the preceding six (6) source test results were less than 0.0124 gram/kilogram (0.025 pound/ton) black liquor solids. If semi-annual source test results equal or exceed 0.0124 gram/kilogram (0.025 pound/ton) black liquor solids, the frequency shall revert to quarterly. [LRAPA 33-070-6.B(4)] [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
 - 136.a.i. For Method 16A, the average emissions are calculated from three (3) 1-hour test results.
 - 136.a.ii. For the Method 16A/6C hybrid, the average emissions are calculated from three (3) 1-hour test results.
 - 136.b. In accordance with LRAPA 33-070-1, Definition 9 for PM, EPA Method 5 shall be used at least quarterly for monitoring pertaining to Condition 133 except that testing may be semi-annual when the preceding six (6) source tests were less than 0.187 kilogram/air dry metric ton (0.375 pound/ton) of production. [LRAPA 33-070.6.C(6)]
 - 136.c. DEQ Method 5 shall be used for measuring particulate matter emissions in accordance with the definition of "particulate matter" in LRAPA 33-070-1 to verify the emission factors for the PSELs from emissions units EU-445B and EU-445D as required in Condition 163. The EPA and DEQ Method 5 test runs may be conducted simultaneously by using one (1) sample train.
 - 136.d. The permittee shall calculate emissions of total reduced sulfur and particulate matter in units of kilograms per metric ton of equivalent air dried pulp production by using the arithmetic average concentration and the stack flow rate obtained from the source test data in Conditions 136.a and 136.b and the daily average equivalent pulp production in Condition 82.c for EU-445B and Condition 97.c for EU-445D. [LRAPA-only enforceable for total reduced sulfur pending EPA approval of Section 111(d) Plan]
 - 136.e. The permittee may redetermine the scrubber liquid flow, scrubber liquid pH, or scrubber differential pressure emission action levels in Condition 135, as appropriate, based on historical data or other information and submit an application to LRAPA to change the applicable action level(s). The redetermined levels shall become effective upon approval in writing by LRAPA.
- 137. The permittee shall continuously monitor the 3-hour block average liquid flow, or when that is not possible shall monitor the liquid flow at least once each shift for each Smelt Dissolving Tank Scrubber, CD445-164 (#3 East DTV), CD445-162 (#3 West DTV) and CD445-164 (#4 DTV), in accordance with the facility's established written operating instructions, which shall be approved in writing by LRAPA, for monitoring pertaining to Conditions 133, 134, and 135. [LRAPA 35-0160 and LRAPA 35-0210]
 - 137.a. The permittee shall maintain an alarm on the scrubbing liquid flow rate to the scrubber that is triggered when the liquid flow rate deviates from the approved action level established by Condition 136.iv. Corrective action shall be taken when the scrubbing liquid flow rate deviates from the approved action level.

- 137.b. The deviation from an action level shall not by itself be considered a violation of an emission standard in this permit.
138. The permittee shall continuously monitor the 3-Hour block average liquid flow and liquid pH for each Smelt Dissolving Tank Scrubber, CD445-164 (#3 East DTV), CD445-162 (#3 West DTV) and CD445-164 (#4 DTV), in accordance with the facility's established written operating instructions, which shall be approved in writing by LRAPA, for monitoring pertaining to Conditions 133, 134 and 135. [LRAPA 35-0160 and LRAPA 35-0210]
- 138.a. Acceptable pH ranges will be established for each scrubber's liquid flow rate. The range proposed shall be based upon statistical analysis of the data, where the acceptable range equals the average plus or minus two (2) standard deviations, or other statistical method approved by LRAPA. The permittees initial acceptable pH range is >pH10.4 per Condition 135.b and is set based on the permittee's study submitted to LRAPA on December 30, 2004, and accepted by LRAPA upon issuance of this permit.
- 138.b. The permittee may redetermine the action levels, as appropriate, based on historical data or other information and submit an application to LRAPA to change the applicable action level(s). The redetermined levels shall become effective upon approval by way of the appropriate permit revision procedures specified in OAR Division 218.
- 138.c. The permittee shall maintain an alarm on the scrubbing liquid pH that is triggered when the 3-hour block average liquid pH deviates from the approved action level established by Condition 138.a. Corrective action shall be taken when the scrubbing liquid flow rate deviates from the approved action level.
- 138.d. When the continuous pH measurement is not possible or malfunctioning, the permittee may provide backup systems including but not limited to using once per shift manual samples and portable pH meter testing, or use continuously monitored caustic flow to the scrubber as a surrogate for pH. Caustic flow may be measured with a flow measurement device including caustic metering pump speed, if such data can be correlated with pH. If the backup systems are utilized, the permittee shall provide LRAPA with written information to establish the correlation between caustic flow and pH within 30 days of the first occurrence. If the backup systems are utilized or the facility does not exceed the 10% missing data allowance provided in Condition 193, the facility is in compliance with the continuous parameter monitoring requirement.
- 138.e. The deviation from an action level shall not by itself be considered a violation of an emission standard in this permit.

MISCELLANEOUS TRS EMISSION UNITS EU-275C and EU-275D

Table 17. EU-275C and EU-275D Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
33-070-3.A(5)(a)	139	TRS	0.078 kg/metric ton pulp (0.156 lb/ton) daily arithmetic average	Periodic ST	141	Annual
33-070-3.D	140	Opacity	20% 3 minutes in 60 minutes	VE Periodic Monitoring	17	Quarterly until #1 and #3 Slakers are removed
32-015-2	140	PM/PM ₁₀	0.1 gr/dscf, average of 3 test runs	I&M Recordkeeping	141	Monthly

139. The permittee shall not cause or allow the emission of total reduced sulfur in excess of 0.078 kilogram/metric ton (0.156 pound/ton) of production from all “Other Sources” EU- 275C and EU-275D, excluding Lime Kilns, Recovery Furnaces, Smelt Dissolving Tank Vents, and including the devices/processes listed in Tables 21 and 22, as a daily arithmetic average (daa) in accordance with LRAPA 33-070-3.A.(5)(a). If the two (2) tank vents from the precipitator ash mix tank vent (device TA445-563) and the boiler and economizer ash mix tank vent (device TA445-333) are vented to the No. 4 Recovery Smelt Dissolving Tank vent scrubber inlet, then the TRS emission from these tanks are not applicable to the EU-275C or EU-275D Other Source TRS limit, but are included in the Smelt Dissolving Tank TRS limit at Condition 132. If these ash mix tank vents are vented to ambient (not normal operating condition), their TRS emissions are subject to the Other Source TRS limits. Total reduced sulfur emissions shall be monitored and measured in accordance with Condition 141. [LRAPA 33-070-3.A(5)(a), LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]

Table 18. EU-275C Devices and Descriptions

Device ID	Device/Process Name
FU401-098	Combined Emissions from Kamyr Chip Bins
FA401-098	“A” Chip Metering Bin Exhaust Fan
FA401-099	“B” Chip Metering Bin Exhaust Fan
PS420-999	Kamyr Brown Stock Washer System
EQ420-018	Brown Stock Washer #1 Fugitives
EQ420-020	Brown Stock Washer #2 Fugitives
FA420-046	Kamyr #2 Washer Hood Fan
FA420-047	Kamyr #1 Washer Hood Fan
PS420-107	Kamyr Diffusion Washer Vent
TA420-096	Kamyr Washer Foam Tower
TA186-120	VCE Compressor Vent

Device ID	Device/Process Name
TA440-003	#3 Weak Black Liquor Tank
TA440-004	#4 Weak Black Liquor Tank
TA440-067	#2 Strong Liquor Oxidation Tank
TA441-050	#1 Strong Liquor Oxidation Tank
TA445-300	#7 Strong Black Liquor Tank
TA445-534	No. 4 Precipitator Mix Tank

Table 19. EU-275D Devices and Descriptions

Device ID	Device/Process Name
EQ420-070	Kamyr 480 Bauer Refiner Chest Vent
FA400-084	Batch Digesters Combined
TA400-019	#1 Digester
TA400-022	#2 Digester
TA400-025	#3 Digester
TA400-028	#4 Digester
TA400-031	#5 Digester
TA400-034	#6 Digester
TA400-037	#7 Digester
TA186-140	Accumulator Surge Tank
TA420-014	Hot Water Tank
TA443-082	Bergstrom Storage Tank
TA455-010	#4 Causticizer
TA455-014	#6 Causticizer
TA456-011	#1 Causticizer
TA456-013	#2 Causticizer

140. The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere from EU-275C and EU-275D, devices TA455-007 and TA456-007, listed in Condition 139 which is equal to or greater than 20% opacity for a period aggregating more than three (3) minutes in any one (1) hour, excluding uncombined water. Opacity shall be monitored in accordance with Condition 17. [LRAPA 32-010-1.B, 32-010-3 & 33-070-3 D]

Monitoring for Emissions Unit: “Other Sources” of TRS, EU-275C and EU-275D
[OAR 340-218-0050(3)(a)]

141. The permittee shall measure total reduced sulfur emissions, as H₂S, from the miscellaneous TRS sources listed in Condition 139 in accordance with the following source test procedures for monitoring pertaining to Condition 139: [33-070-6.B., LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]
- 141.a. Examine all past source test data for miscellaneous TRS sources.
- 141.b. Source testing is not required for that group of miscellaneous TRS sources where the most recent representative test, or the average emission rate from the prior source test data for each individual source demonstrates that its emissions are less than 3% of the limit (0.0023 kg/admt pulp as H₂S, 0.0047 lbs per adt combined pulp production) and the aggregate average emissions rates add up to less than 10% of the limit (0.0078 kg/admt pulp as H₂S, 0.0156 lbs per adt combined pulp production). For those sources in this group, the permittee shall calculate TRS emissions using the most recent representative test result or the average emission rate from prior test data.
- 141.c. If a source that is listed in Condition 139 has never been tested, the permittee shall test that source within one (1) year of Title V permit issuance using the following source test plan:
- 141.c.i. A single TRS sample shall be collected in sample bags from each source. The collection system shall consist of a sample probe, citrate scrubber solution (Method 16A) or other LRAPA-approved SO₂ scrubbing system, pump, and sample bag. Each sample shall be collected over a minimum 20-minute period, unless a shorter time is necessary due to process operations. Direct sampling may be used in lieu of a sample bag.
- 141.c.ii. The samples shall be analyzed either by a TRS analyzer, calibrated and operated in accordance with Method 6C; or, the TRS may be thermally oxidized to SO₂ (Method 16A) and analyzed in accordance with Method 6C. The samples shall be analyzed within four (4) hours of collecting the samples.
- 141.c.iii. Method 2 shall be used to measure the volumetric flow rate of the miscellaneous source exhaust gases concurrently with the collection of the TRS samples. If Method 2 cannot be used on a source due to extremely low velocity pressures, high moisture, or unacceptable sample duct configurations, the permittee may use a hot wire or vane anemometer to measure the flow rate of the exhaust gases. When using procedures other than Method 2, the permittee shall calibrate and operate the instrumentation in accordance with the facility's established written operating instructions, which shall be approved in writing by LRAPA. If the exhaust gas flow rate is too low or too difficult to measure reliably with available instrumentation, the permittee may employ best professional judgment in estimating the flow rate. In all cases, the method of exhaust gas flow measurement or estimation shall be documented. Upon LRAPA approval, a reasonable engineering estimate may be used to initially quantify a device against the 3%/10% testing criteria in Condition 141.b.
- 141.c.iv. During each test, the permittee shall record the following information:
- 141.c.iv.A. Average daily equivalent pulp production (ADMT), black liquor solids flow (gpm), black liquor solids (weight %), total reduced sulfur emissions (ppm); and
- 141.c.iv.B. Average daily equivalent pulp production (ADMT) shall be calculated in accordance with Conditions 125.c, 82.c, or 97.c. Total pulp mill production shall be used for all other sources listed in Condition 139 to calculate lb/ADMT.
- 141.d. If the newly tested source meets the same criteria as in Condition 141.b above, then that source no longer needs to be tested annually.
- 141.e. The miscellaneous TRS sources listed in Condition 139 that do not meet the criteria as in Condition 141.b shall continue to be tested annually. The list of miscellaneous TRS sources and monitoring points to be tested annually shall be submitted in writing to LRAPA within 45 days prior to the initial source test planned to comply with Condition 141 after the Title V permit is

issued. This initial test plan, including sources that no longer require testing under the requirements of Condition 139, shall be based on the prior permittee's data reported to the LRAPA Director on February 3, 1998.

- 141.f. Successive annual source tests shall be at least six (6) months apart.

POWER BOILER, EMISSIONS UNIT EU-150 A

Table 20. EU-150A Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/ Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
32-010-1,3	142	Opacity	20% 3 minutes in 60 minutes	Recordkeeping	146	As per Condition 147 when burning liquid fuels
32-020	143	PM/PM ₁₀	0.2 gr/dscf, average of 3 test runs	Recordkeeping/ Periodic ST	146	Daily/ Annually during oil burning
42-0080 [formerly 34-060(5)]	144	Fuel Use	Use only NG, used or reprocessed oil, No 2, No. 4 & No. 6 fuel oils	Recordkeeping/ Periodic ST	146	Daily/ Annually during oil burning
40 CFR Part 63 Subpart DDDDD	145	HAPs	See rule	See rule	NA	See rule

142. The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere from emissions unit EU-150A to exceed an opacity equal to or greater than 20% for a period exceeding three (3) minutes in any one (1) hour, excluding uncombined water. Opacity shall be monitored in accordance with Condition 147. [LRAPA 32-010-1.B & 32-010-3]
143. The permittee shall not cause or allow the emission of particulate matter in excess of 0.2 grain per dry standard cubic foot of exhaust gas from emissions unit EU-150A, corrected to 12% CO₂ or 50% excess air. Particulate matter emissions shall be monitored in accordance with Condition 147. [LRAPA 32-020]
144. The permittee shall use only natural gas, used or reprocessed oil, No. 2, No. 4 and/or No. 6 fuel oil in the emission unit EU-150A. Fuel shall be monitored in accordance with Condition 146. [42-0080 formerly 34-060(5)]
145. The permittee shall comply with all applicable standards contained in 40 CFR Part 63 Subpart DDDDD – National Emission Standard for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters for EU-150A [40 CFR 63.7490]

Monitoring for Emissions Unit: Power Boiler, EU-150A [OAR 340-218-0050(3)(a)]

146. The permittee shall maintain daily and annual records of all fuels used in emissions unit EU-150A during each calendar year for monitoring pertaining to Conditions 142, 143, and 144. [LRAPA 35-0120, 35-0160 and 42-0080 (formerly 34-070)]
- 146.a. If oil is used in Power Boiler EU-150A and provides more than 5% of the heat input per calendar year, the following procedures and test methods shall be used for that boiler for certifying compliance when the boiler is burning oil:
- 146.a.i. Except for startup, if two (2) or more visible emissions tests during the permit term result in 20% or more opacity (Method 9 basis), then LRAPA may request for that year that a DEQ Method 5 shall be used annually to measure particulate matter emissions, while burning oil unless the results from two (2) consecutive source tests are less than 75% (0.15 gr/dscf) of the grain-loading limit in Condition 143, then no further source

testing shall be required during the permit term. If oil is used in a boiler at the end of the year because of a natural gas curtailment, the source test shall be performed within 45 days of the onset of burning oil. If oil is used in the boiler and the 5% heat input test requirement is triggered within 45 days of the end of the calendar year, the Method 5 test may be used to represent both the current and following year.

- 146.a.ii. During or immediately after startup, except for the visual interferences in Condition 146.c, the permittee shall conduct a 6-minute visible emission survey of each monitoring point following the general procedures outlined in EPA Method 22. Condensed water vapor is not considered an emission for the purposes of this survey method. The visible emission surveys will be performed by employees or contractors of the permittee who have been trained in the general procedures for determining the presence of visible emissions.
- 146.a.iii. When burning liquid fuels, the permittee shall conduct a weekly 6-minute visible emission survey of each monitoring point following the general procedures outlined in EPA Method 22. Condensed water vapor is not considered an emission for the purposes of this survey method. The visible emission surveys will be performed by employees or contractors of the permittee who have been trained in the general procedures for determining the presence of visible emissions. If the surveys conducted during three (3) consecutive observation periods show no visible emissions, the surveys need only be done once per month.
 - 146.a.iii.A. If any visible emissions are identified for any of the above emissions units for more than 5% of the survey time (18 seconds), the permittee shall do the following:
 - 146.a.iii.A.(1) Take corrective action to eliminate the visible emissions. The permittee shall record the corrective action in a log; **or** modified EPA Method 9 shall be used to determine opacity in accordance with the ODEQ's *Source Sampling Manual*. The modified EPA Method 9 opacity shall be conducted on the affected monitoring point within 24 hours. Each modified EPA Method 9 observation period shall be for a minimum of six (6) minutes unless any one (1) reading is greater than 20% opacity, in which case the observation period shall be for a minimum of 60 minutes or until a violation of the emissions standards identified in Condition 143 is documented, whichever is a shorter period. The permittee shall record the results of the modified EPA Method 9 test.
- 146.b. If a Method 9 opacity exceedance occurs, the survey and/or observation frequency for the affected monitoring point will start over with daily observations.
- 146.c. If the observer is unable to conduct the survey and/or modified EPA Method 9 tests due to visual interferences caused by other visible emissions sources (e.g., fugitive emissions during high wind conditions) or due to weather conditions such as fog, heavy rain, or snow, or night-time darkness, which impair visibility, the observer shall note such conditions on the data observation sheet and make at least three (3) attempts to conduct the surveys and/or tests at approximately 2-hour intervals throughout the day. For night-time darkness on an oil startup, the observer shall initially record whether surrogate parameters on the boiler indicate clean stack conditions, then make an initial attempt to complete the visible emission survey by 10:00 a.m. the next mill operating dayshift. In no case shall the initial attempt follow the startup by more than 20 hours. Surrogate parameters may include, but are not limited to, boiler excess O₂, CO, relative quantities of fuel oil and natural gas simultaneously fired, and any firebox camera that indicates proper oil combustion and a clean stack condition. If the visible emissions survey and/or test could not be conducted on the regularly scheduled day due to interferences, the observer shall conduct the test on the following day.

- 146.d. Record keeping for Method 22 visible emission surveys may use Method 22-type standard forms, or computer records that document which individual made the observation, the date and time of the observation, and the nature of the observation.
- 146.e. Prior notification and a pre-test plan are not required to be submitted to LRAPA for each visible emissions survey or modified EPA Method 9 test.
- 146.f. During each source test, the permittee shall record fuel type and usage, opacity, and steam production.
- 146.g. The source tests shall be separated by a minimum period of six (6) months.
- 146.h. A particulate matter source test and visible emissions observations are not required for monitoring pertaining to Conditions 142 and 143 while burning natural gas in emissions units EU-150A.

PACKAGE BOILER, EMISSIONS UNIT EU-150B

Table 21. EU-150B Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirements		
				Method	Condition Number	Frequency
40 CFR 60.43b(f), 60.42(a)(2), 60.11(b) and (c), 46-550 and 46-553	147	Opacity	#20% 6 minutes in 60 minutes #27%	COMs or Method 9 when burning oil, n/a on natural gas	158	Weekly
32-010-1,3	148	Opacity	20%, except for 3 minutes in 60 minutes	Recordkeeping or Method 9	17and 158	Weekly
32-015-2	149	PM/PM ₁₀	0.1 gr/dscf, average of 3 test runs	Testing and Recordkeeping	159	Daily
40 CFR 60.42(a)	150	PM	#0.10 lb/MMBtu	Testing and Recordkeeping	159	
32-065-2.B	152	SO ₂	≤0.5 % sulfur in distillate fuel oil	Recordkeeping	160	Continuously
40 CFR 60.43(a)(1) and 32-070-2.A	151	SO ₂	0.8 lb/MMBtu, liquid fuels	Recordkeeping	160	Daily
40 CFR 60.42b(j), 46-553	152	SO ₂	#0.5 % sulfur in fuel oil	Recordkeeping	160	Continuously
40 CFR 60.44b(a), 40 CFR 60.44(a)(1), 46-553	153	NO _x	#0.2 lb/MMBtu, heat input	CEM	161	Daily
32-007	154	FGR System	O & M	Recordkeeping	162	Monthly
42-0080 [formerly 34-060(5)]	155	Fuel Use	Use only NG, #2 or used or reprocessed oil	Recordkeeping	163	Daily
40 CFR Part 63 Subpart DDDDD	157	HAPs	See rule	See rule	NA	See rule

147. The permittee shall not cause to be discharged into the atmosphere from emissions unit EU-150B any gases which exhibit greater than 20% opacity (6-minute average) except for one (1) 6-minute period per hour (60 minutes) of not more than 27% opacity when burning No.2 fuel oil only, excluding uncombined water. This limit does not apply during periods of startup, shutdown and malfunction under 40 CFR 60.46b(a). Opacity shall be measured in accordance with Condition 158. [40 CFR 60.43b(f), 60.11(b) and (c), LRAPA 46-550]
148. The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere from emissions unit EU-150B for a period or periods aggregating more than three (3) minutes in any 1-hour, which is equal to or greater than 20% opacity, excluding uncombined water. Opacity shall be measured in accordance with Condition 17 and 158. [LRAPA32-010-1,3]
149. The permittee shall not cause or allow the emission of particulate matter in excess of 0.1 grain per dry standard cubic foot from emissions unit EU-150B, corrected to 12% CO₂ or 50% excess air. Particulate matter emissions shall be measured in accordance with Condition 159. [LRAPA 32-030]

150. The permittee shall not cause or allow the emission of particulate matter in excess of 43 ng/J (0.10 lb/MMBtu) from emissions unit EU-150B. Particulate matter emissions shall be monitored in accordance with Condition 159. [40 CFR 60.42(a)(1)].
151. The permittee shall not cause suffer, or allow the emission into the atmosphere of sulfur dioxide in excess of 0.8 pounds/million British thermal unit (lbs/MMBtu) heat input, maximum two-hour average, when liquid fuel is burned in emissions unit EU-150B (heat input >250 MMBtu per hour). Sulfur dioxide emissions shall be monitored in accordance with Condition 160 **or** measured in accordance with Condition 175. [LRAPA 32-070-2.A.]
152. The permittee shall not use fuel oil other than very low sulfur oil, as defined in 40 CFR 60.41b, in emissions unit EU-150B. Sulfur dioxide emissions shall be monitored in accordance with Condition 160 **or** measured in accordance with Condition 175. [40 CFR 60.42b(d), LRAPA 46-550]
153. The permittee shall not cause or allow the emission of nitrogen oxides (as NO₂) in excess of 86 ng/J (0.2 pounds/million British thermal unit (lbs/MMBtu)) heat input from emissions unit EU-150B when burning any fuel. Nitrogen oxides emissions shall be monitored in accordance with Condition 161. [40 CFR 60.44b(a)(1)(ii), 40 CFR 60.11(d), LRAPA 46-550]
154. The permittee shall operate the existing flue gas recirculation (FGR) fan. The fan shall be monitored daily for operating status, and if found to be down for maintenance reasons, the FGR fan shall be repaired at the next available shutdown on the boiler, EU-150B, provided that the boiler continues to meet the requirements of Condition 153 as monitored according to Condition 161. Inspection, operation and maintenance records shall be available to LRAPA upon request. [LRAPA 32-070] [40 CFR 60.11(d)]
155. The permittee shall use only natural gas, No. 2 fuel oil and/or used or reprocessed oil in the emission unit EU-150B. Fuel shall be monitored in accordance with Condition 163. [42-0080 (formerly 34-060(5))]
156. Compliance with applicable standards may be determined using non-reference sampling methods in accordance with 40 CFR 60.11(g).
157. The permittee shall comply with all applicable standards contained in 40 CFR Part 63 Subpart DDDDD – National Emission Standard for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters for EU-150B [40 CFR 63.7490]

Monitoring for Emissions Unit: Package Boiler, EU 150B
[OAR 340-218-0050(3)(a)]

158. The permittee shall monitor visible emissions to demonstrate compliance with Condition 147 from emissions unit EU-150B by calibrating, maintaining, and recording the output of a continuous opacity monitoring system (COMS) when burning liquid fuels. The permittee shall monitor visible emissions to demonstrate compliance with Condition 148 from EU-150B by either using the COMS or the permittee may conduct a modified Method 9 test once per week when burning liquid fuels. However, the Method 9 testing shall only be required as a backup to the COMS monitoring in case of monitor failure, when burning fuel oil, otherwise the COMS monitoring shall satisfy the Method 9 monitoring requirements and the applicable opacity limit when using the COMS shall always be as per Condition 147. If the COMS shows an exceedence of the Condition 147 (20%/27%) standard and the permittee continues to burn fuel oil, then a Method 9 test shall be conducted as soon as possible to demonstrate compliance with Condition 148. No visible emissions monitoring (including COMS) shall be required when burning natural gas. When burning a combination of gas and liquid fuels, the monitoring requirements for fuel oil shall be followed. The procedures in the Federal New Source Performance Standards (NSPS) shall be used for COMS operation, recordkeeping, and reporting. The COMS shall meet the performance specifications in 40 CFR 60, Appendix B. The quality assurance procedures in 40 CFR 60, Appendix F shall be implemented. Zero and span calibration checks shall be conducted daily. The data shall be reduced to and reported as 6-minute averages. [40 CFR 60.48b and 60.13]
 - 158.a. The COMS shall complete a minimum of one (1) cycle of sampling and analyzing for each successive 10-second period and one (1) cycle of data recording for each successive 6-minute period. [40 CFR 60.13(e)(1)]
 - 158.b. The permittee shall observe all other monitoring requirements as in [40 CFR 60.13].

- 158.c. Neutral density filter audits shall not be required for EU 150B when COMS operation is not required. The COMS shall be maintained in operational condition by completing the normal preventive maintenance schedule so that it is on line and calibrated if the permittee burns oil in EU 150B; however, there is no requirement to maintain if the permittee burns only natural gas in EU150B. If the permittee burns oil in EU 150B, then a neutral density filter audit shall be completed as soon as it is safe and practical, but not later than six (6) weeks from the advent of oil burning. If oil burning continues, subsequent neutral density filter audits shall be conducted in accordance with Condition 66.g.
- 159. The following procedures and test methods shall be used for certifying compliance with Condition 149 from emissions unit EU-150B at monitoring point EQ150-301: [LRAPA 35-0120, 35-0160 and 42-0080 (formerly 34-070)]
 - 159.a. EPA Method 5 and DEQ Method 5 testing shall be performed while burning exclusively liquid fuels to measure PM emissions for compliance with Conditions 149 and 150 (EPA Method 5) or Condition 187 (DEQ Method 5 for PSEL verification testing).
 - 159.b. If any source test is required, the source tests shall be separated by a minimum period of six (6) months.
 - 159.c. During each test that may be required, the permittee shall record the following information:
 - 159.c.i. Type and amount of oil usage, and steam production; and
 - 159.c.ii. Opacity, as measured by the COMS required in Condition 158 or by Method 9, exhaust temperature levels, excess oxygen levels, and stack flows (dscfm).
 - 159.d. A report including the following information shall be submitted to LRAPA for review and approval within 45 days of completing each source test for emission unit EU-150B, unless otherwise approved by LRAPA:
 - 159.d.i. Summary of the results of the source test,
 - 159.d.ii. Results of the visible emissions observations,
 - 159.d.iii. Exhaust temperatures; and
 - 159.d.iv. Measured excess oxygen levels during the tests.
- 160. While burning oil in emissions unit EU-150B, the permittee shall demonstrate that the oil meets the definition of distillate oil in accordance with 40 CFR 60.42b(j) and LRAPA 46-550 by maintaining fuel receipts from the fuel supplier for monitoring pertaining to Conditions 151 and 152. The receipts shall certify that the oil complies with the specifications for fuel oil Nos. 1 or 2, as defined by the American Society of Testing and Materials in *ASTM D396-78* or its equivalent. The oil need not meet the fuel nitrogen content of 0.05 weight percent or less. [40 CFR 60.49b(r), 60.43(a)(1), 60.42b(j) and LRAPA 46-553 and 32-065-2.B]
- 161. The permittee shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for measuring nitrogen oxides emissions discharged to the atmosphere from emissions unit EU-150B and record the output of the system (CMS) in accordance with 40 CFR 60.48b(b) and 40 CFR 60.13 for monitoring pertaining to Condition 153. [LRAPA 35-0210]
 - 161.a. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring system. [40 CFR 60.48b(e)]
 - 161.b. The continuous monitoring system required under Condition 161 shall be operated and data recorded during all periods of operation of emissions unit EU-150B, except for continuous monitoring system breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span check adjustments.
 - 161.c. The permittee shall determine compliance with the nitrogen oxides standard in Condition 153 on a continuous basis by using a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days. [40 CFR 60.46b(e)(3)]

- 161.d. The 1-hour average nitrogen oxides emission rates measured by the continuous monitoring system required by Condition 161 shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates for comparison with the limit in Condition 153. The 1-hour averages shall be calculated using the data points equally spaced over each 1-hour period. At least two (2) data points must be used to calculate each 1-hour average. [40 CFR 60.13(h) and 40 CFR 60.48b(d)]
- 161.e. The span value of the CEM shall be 500 ppm while burning liquid fossil fuel, natural gas or a mixture of both. [40 CFR 60.48b(e)(2)]
- 161.f. When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, or repairs, emission data will be obtained by using standby monitoring systems, EPA Method 7E, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam-generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. The standby CMS for Nitrogen Oxides shall be parameter monitoring on the EU150B Flue Gas Recirculation (FGR) fan. If the FGR fan is operating under controlled automatic conditions while the CEM is temporarily down for the reasons above, the documentation of FGR operation shall serve as the standby monitoring. [40 CFR 60.48b(f)]
- 161.g. The conversion procedures in Condition 161.d shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu). When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (dry).
- 162. The permittee shall record in a log the results of the inspections and corrective actions taken for maintaining the flue gas recirculation system for the package boiler, EU-150B, for monitoring compliance with Condition 154. [LRAPA 35-0210]
- 163. The permittee shall maintain daily and annual records of type and amount of fuel usage burned in the package boiler, EU-150B, for monitoring compliance with Condition 155. [LRAPA 35-0210]

OTHER EMISSIONS UNITS

Table 22. Other Emission Units Emission Limits and Standards

EU/ Device ID	Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/ Standard	Monitoring Requirements		
					Method	Condition Number	Frequency
EU-310, Devices TA310-232, TA310-243, TA310-254, FU310-999 ^E and TA315- 148 EU-330, Device FU330-999	32-015-2	165	PM/PM ₁₀	0.1 gr/dscf, average of 3 test runs	ST Periodic Monitoring/ I&M Recordkeeping	169, 176	Monthly
	32-007	170	I & M	NA	I&M Recordkeeping	176	Monthly
EU-402	32-010-1,3 & 33-070-3.D	164	Opacity	20% 3 minutes in 60 minutes	VE Periodic Monitoring	17	Monthly for device PS402- 401
EU-402, Device PS402- 101	32-030	167	PM/PM ₁₀	0.1 gr/dscf corrected to 12% CO ₂ , or 50% excess air	Recordkeeping/ Periodic ST	173, 175, 176	Monthly
EU-402, Device PS402- 101	42-0080 [formerly 34- 060(5)]	168	Fuel Use	Use only NG	Recordkeeping	174	Daily
EU-402, Device CD402-406	32-007	169	I & M	NA	I&M Recordkeeping	175	Weekly
EU-440, Devices TA441-061, TA441-062	32-015-1	166	PM/PM ₁₀	0.2 gr/dscf	I&M Recordkeeping	184	NA
EU-715A EU-715B	32-010-1,3 & 33-070-3.D	164	Opacity	20% 3 minutes in 60 minutes	VE Periodic Monitoring	17	Monthly June through September for device FA715- 122 only
	32-015-2	166	PM/PM ₁₀	0.2 gr/dscf	I&M Recordkeeping	184	NA

164. The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere from PS402-401, and FA715-122 to exceed an opacity equal to or greater than 20% for a period exceeding three (3) minutes in any one (1) hour, excluding uncombined water. Opacity shall be monitored in accordance with Condition 17. [LRAPA 32-010-1,3 & 33-070.3D.]
165. The permittee shall not cause or allow the emission of particulate matter in excess of 0.1 grain per dry standard cubic foot from emissions units EU-310, (chip cyclone devices TA310-232, TA310-243, TA310-

- 254), and EU-330 (fines bin cyclone device FU330-999). Particulate matter emissions, except as noted below, shall be monitored in accordance with Conditions 170 and 176 and measured in accordance with Condition 184.
166. The permittee shall not cause or allow the emission of particulate matter in excess of 0.2 grain per dry standard cubic foot from emissions unit EU-440 (saltcake storage tank devices TA441-061 and TA441-062) and paper machine emission units 715A, 715B. Particulate matter emissions shall be monitored in accordance with Condition 184. [LRAPA 32-015-1]
167. The permittee shall not cause or allow the emission of particulate matter in excess of 0.1 grain per dry standard cubic foot from emissions unit EU-402 device PS402-401 corrected to 12% CO₂ or 50% excess air. Particulate matter emissions shall be monitored in accordance with Condition 173. And the permittee shall not cause or allow the emission of particulate matter in excess of 0.1 grain per dry standard cubic foot from EU-402 with monitoring according to Conditions 170 and 173. [LRAPA 32-030]
168. The permittee shall use only natural gas in emission unit EU-402 device #PS402-401. Fuel shall be monitored in accordance with Condition 174. [42-0080 formerly 34-060(5)]
169. In addition to the standards in Conditions 167 and 168, the permittee shall take corrective action to return to highest and best efficient operations if the water flow, on EU-402 scrubber, CD402-406 deviates from acceptable ranges that will be established by Condition 175. [LRAPA 35-0200]
- 169.a. These deviations and the corrective actions shall be recorded in accordance with Condition 175.
- 169.b. The deviation from an action level shall not by itself be considered a violation of an emission standard in this permit. [LRAPA 32-007-2.D]
170. At least once per month, the permittee shall inspect emissions units EU-310 (drop points for chip cyclone devices TA310-232, TA310-243, and TA310-254) and Chip Handling Belts FU310-999E and repair, if necessary, all material transfer points causing excessive fugitive emissions which leave the emission unit boundaries, if the devices operate more than 10 days per month. Inspections shall be monitored in accordance with recordkeeping in Condition 176. [LRAPA 32-007]

APPLICABLE REQUIREMENT: PROCESS WEIGHT RULE

Table 23. Applicable Requirement -- Process Weight Rule

Emissions Unit(s)	Device Name	Materials Introduced Into Process	Monitoring Requirements		
			Method	Condition	Frequency
EU-310	Chip Handling System FU310-999	Chips	None	172	NA
EU-402	#2 Liquor Concentrator (Device PS402-401)	Alternative Fiber	ST, Periodic Monitoring	173	Once/Permit Term

171. The permittee shall not cause or allow the emission of particulate matter in any one (1) hour from any process listed in the table above in excess of the amount shown in Table 1 of LRAPA 32-045 for the process weight allocated to that process. Particulate matter emissions shall be monitored in accordance with Condition 172 for chip handling cyclone device FU310-999, or Condition 173 for PS402-401. [LRAPA 32-045] No further monitoring, testing, or recordkeeping is required other than for these two (2) devices.

Monitoring for Other Emissions Units

[OAR 340-218-0050(3)(a)]

172. For EU310 device FU310-999, or other similar chip-handling cyclone, the amount of materials introduced to the process during the source test shall be used to determine the process weight on Table 1 of LRAPA 32-045. A reasonable engineering estimate may be used if no direct measurement is possible or practical to determine the process weight. Monitoring shall be according to Condition 184. [LRAPA 35-0160 formerly 34-070]
173. DEQ Method 5 shall be used to measure particulate matter emissions from the following emissions unit once during the first two (2) years of the permit term if the process is operating, or within two (2) years of startup: [LRAPA 35-0160 formerly 34-070]
- 173.a. EU 402 device PS402-401 for monitoring pertaining to Conditions 167 and 171.
- 173.b. The amount of materials introduced to the process during the source test shall be used to determine the process weight on Table 1 of LRAPA 32-045. A reasonable engineering estimate may be used if no direct measurement is possible or practical to determine the process weight.
174. The permittee shall maintain daily and annual records of fuel usage burned in EU-402 for monitoring compliance with Condition 168. [LRAPA 35-0160 formerly 34-070]
175. The permittee shall record in a log the results of the inspections and any corrective actions taken for the emissions unit EU-402 device PS402-401 wet scrubber (CD402-406) along with the water flow to the water showers, and pressure drop or other appropriate parameters once per week for monitoring pertaining to Condition 169. After collecting data on EU-402 device PS402-401 wet scrubber for three (3) months, the permittee shall submit proposed action levels for scrubber operating parameters based on average plus/minus two (+/-2) standard deviations in writing to LRAPA for approval. Approved action levels shall be used for monitoring pertaining to Condition 167. [LRAPA 35-0160 formerly 34-070]
176. The permittee shall record in a log the results of the inspections and any corrective actions taken for the following emissions units: EU-310 (drop points for Chip Cyclone devices TA310-232, TA310-243, and TA310-254,) and for Chip Handling Belts FU310-999E, once per month for monitoring pertaining to Conditions 165 and 170. [LRAPA 35-0160 formerly 34-070]

INSIGNIFICANT ACTIVITIES

Table 24. Insignificant Activities Emission Limits and Standards

Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirements	
				Method	Condition Number
32-010-1,3 & 33-070-3D	177	Opacity	20% 3 minutes in 60 minutes	Not required	NA
32-030	178	PM/PM ₁₀	0.1 gr/dscf	Not required	NA
32-015-2	179	PM/PM ₁₀	0.1 gr/dscf	Not required	NA
33-070-3.A(5)(a)	180	TRS	0.078 kg/metric ton (0.156 lb/ton) daily arithmetic average	Not required	NA
40 CFR Part 63, Subpart ZZZZ	181	HAPs	Work Practices for emergency-use generators	Not Required	NA

177. The permittee shall not cause or allow the emissions of any air contaminant into the atmosphere to exceed an opacity equal to or greater than 20% for a period exceeding three (3) minutes in any one (1) hour, excluding uncombined water, from any categorically insignificant activity or any activity included in the aggregate insignificant emissions. Opacity shall be measured in accordance with Condition 184. [LRAPA 32-010-1,3 and 33-070-3D.]
178. The permittee shall not cause or allow the emission of particulate matter, for any 3-hour average period, in excess of 0.1 grains per dry standard cubic foot, corrected to 12% CO₂ or 50% excess air, from any fuel burning equipment and refuse burning equipment that is a categorically insignificant activity or any activity included in the aggregate insignificant emissions. Particulate matter emissions shall be measured in accordance with Condition 184. [LRAPA 32-030]
179. The permittee shall not cause or allow the emission of particulate matter, for any 3-hour average period, in excess of 0.1 grains per dry standard cubic foot, from any non-fugitive air contaminant source other than fuel burning and refuse burning equipment that is a categorically insignificant activity or any activity included in the aggregate insignificant emissions. Particulate matter emissions shall be measured in accordance with Condition 184. [LRAPA 32-015-2]
180. The permittee shall not cause or allow the emission of total reduced sulfur in excess of 0.078 kilogram/metric ton (0.156 pound/ton) of production from all categorically insignificant activity and all activities included in the aggregate insignificant emissions in addition to the "other sources" listed in Condition 139 as a daily arithmetic average (daa) in accordance with LRAPA 33-070-3.A(5)(a). Total reduced sulfur emissions shall be measured in accordance with Condition 184. [LRAPA-only enforceable pending EPA approval of Section 111(d) Plan]

Reciprocal Internal Combustion Engine (CI-RICE) NESHA for Emergency Generators

181. For all existing stationary reciprocating internal combustion engines the permittee shall meet the requirements from 40 CFR Part 63 Subpart ZZZZ including but not limited to the following. If the permittee does not operate each engine according to the requirements in 181.a through 181.c, the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and will need to meet all requirements for non-emergency engines. These conditions are applicable to both compression ignition (CI) and spark ignition (SI) engines: [40 CFR 63.6640]

- 181.a. There is no time limit on the use of emergency stationary RICE in emergency situations.
- 181.b. The permittee may operate each emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.
- 181.c. The permittee may operate each emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this condition as long as the power provided by the financial arrangement is limited to emergency power.

GENERAL TESTING AND MONITORING REQUIREMENTS [OAR 340-218-0050(1)]

- 182. No source testing, including PSEL verification testing, is required under this permit for any unit that has operated less than 438 hours during the calendar year. [OAR 340-218-0050(3)(a)(C) and LRAPA 35-0120(3)]
- 183. Unless otherwise specified in this permit, the permittee shall conduct all compliance testing in accordance with the ODEQ *Source Sampling Manual*, the latest LRAPA-approved Quality Assurance Plan, or an alternative method approved in writing by LRAPA. Particulate matter testing of devices EU 445A, EU 445B, EU 445C, EU 445D, EU455 shall measure PM as defined by EPA Method 5 or DEQ Method 5 front-half catch. When particulate matter testing is conducted on these devices, the DEQ Method 5 test procedure will be followed so that the back-half catch data will be available to LRAPA, but only the EPA Method 5, using water as cleanup solvent instead of acetone is applicable to particulate matter compliance testing for these devices. [OAR 340-218-0050(3) and LRAPA 35-0120(3)]
 - 183.a. LRAPA shall be notified, in writing, at least 15 days prior to any source test, unless LRAPA approves a different deadline under extenuating circumstances. [OAR 340-218-0150(1)(f)]
 - 183.b. Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test and within two (2) hours prior to the tests. Any operating adjustments made during a compliance source performance test, which are a result of consultation during the tests with source testing personnel, equipment vendors or consultants, may render the source performance test invalid.
 - 183.c. Unless otherwise specified by permit condition or LRAPA approved source test plan, all compliance source tests shall be performed as follows:
 - 183.c.i. at least 90% of the design capacity for new or modified equipment;
 - 183.c.ii. at least 90% of the maximum production capacity for existing equipment; or

- 183.c.iii. at 90 to 110% of the normal maximum operating rate for existing equipment. For purposes of this permit, the normal maximum operating rate is defined as the 90th percentile of the average hourly operating rates during a 12 month period immediately preceding the source test. Data supporting the normal maximum operating rate must be included with the source test report.
- 183.c.iv. If the process rate during the test is determined by Condition 183.c.iii, the permittee must maintain production records on an hourly basis in addition to any other records that may be required by this permit or an applicable requirement.
- 183.d. Each source test shall consist of at least three (3) test runs, and the emissions shall be reported as the arithmetic average of all valid test runs. There must be at least two (2) valid test runs for a source test to be accepted.
- 183.e. The permittee shall request changes in the date for reporting or source testing requirements for extenuating circumstances, except when required by a compliance schedule by submitting the request on an LRAPA-approved Administrative Permit Amendment Application.
184. Although testing is not required by this permit for the permit conditions listed below, if source testing is conducted either voluntarily or upon the request of LRAPA, in addition to the monitoring specified in this permit, the permittee shall use the following test methods or equivalent approved method and averaging times to measure the pollutant emissions: [OAR 340-218-0050(3)]

Table 25. Emission Testing

Permit Condition	Emissions Unit ID	Test Method	Averaging Time	Special Conditions
165, 166, 178, 179	EU-310, EU-440, EU-714A, EU-714B, EU-715A, EU-715B, and EU-AIA (insignificant activities)	DEQ Methods 5, 7, or 8	Average of three (3) 1-hour test runs	DEQ Method 8 is for sources with exhaust gases at essentially ambient conditions (e.g., material - andling cyclones); DEQ Method 7 is for direct contact combustion of other heat sources (e.g., particle and veneer dryers); DEQ Method 5 is for indirect contact fuel-burning equipment (e.g., boilers) and any other source.
142	EU-150A	DEQ Method 5	Average of three (3) 1-hour test runs	The sample time for each test run shall be no less than one (1) hour (31.8 dscf) and no longer than eight (8) hours
152, 151	EU-150A, EU-150B	EPA Methods 6 or 6C	Average of three (3) 1-hour test runs	The sample time for each test run shall be no less than 15 minutes and no longer than one hour
153	EU-150B	EPA Method 7E	Average of three (3) 1-hour test runs	

PLANT SITE EMISSION LIMITS (PSELs)

185. The annual (12-month rolling) plant site emissions (tons per year) shall not exceed the following. [OAR 340-218-0050(1), LRAPA 34-060-5. (prior to October 2008 LRAPA rule change) and 42-0040 through 42-0045]

Table 26. Annual (12-Month Rolling) Plant Site Emission Limits (PSELs)

Pollutant	Plant Site Emission Limit (tons/year)	Unassigned Emissions (tons/year)	Emission Reduction Credits (tons/year)
PM	773	103	0
PM ₁₀	750	88	0
PM _{2.5}	331	81	0
TRS	133	56	0
CO	1,048	2,350	0
NO _x	1,692	193	0
SO ₂	1,521	40	0
H ₂ SO ₄ (SAM)	47	0	0
VOC as propane	1,418	329	0
GHG	468,501	0	0
Lead	0.23	0.6	0

- 185.a. The unassigned emissions are available for *internal* use by the permittee for increases of emissions, consistent with LRAPA Rules and Regulations, upon receipt of written approval by LRAPA. The unassigned emissions are established with the “#2 Paper Machine Productivity Project” modification and will be reduced to no more than the SER at renewal.
- 185.b. The Emission Reduction Credits (ERCs) that were available for *internal or external* use by the permittee for increases of emissions or for sale, consistent with LRAPA Rules and Regulations, upon receipt of written approval by LRAPA ***expired on July 25, 2015***. The ERCs were not used prior to the expiration date and are reverted back to the permittee as unassigned emissions. At the next renewal, the unassigned emissions will be reduced to no more than a Significant Emission Rate (an SER).
- 185.c. The permittee applied on October 16, 2015 to use the following pollutant emissions totals for the “#2 Paper Machine Productivity Project”. The unassigned emissions combined with the ERCs that expired on July 25, 2015 were reduced by the following amounts for internal netting in this Construction ACDP to allow for the corresponding emission increase:
- 185.c.i. CO = 36 tons
 - 185.c.ii. NO_x = 50 tons
 - 185.c.iii. Pb = 0 tons
 - 185.c.iv. PM = 23 tons
 - 185.c.v. PM₁₀ = 23 tons
 - 185.c.vi. PM_{2.5} = 21 tons
 - 185.c.vii. SAM = 0 tons
 - 185.c.viii. SO₂ = 0 tons
 - 185.c.ix. TRS = 13 tons
 - 185.c.x. VOC = 232 tons

PLANT SITE EMISSION LIMIT MONITORING [OAR 340-218-0050(3)(a)]

186. The permittee shall determine compliance with the Plant Site Emission Limits established in Condition 185 of this permit by conducting monitoring in accordance with the following procedures, test methods, and frequencies: [OAR 340-218-0050(3)(a)]

186.a. The permittee shall maintain annual records of the following process parameters:

Table 27. Plant Site Emission Limit Monitoring and Testing

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition 187)	Frequency
EU-150A Power Boiler	CO	Natural Gas Usage	MMBtu	1.40E-2	lb/MMBtu	Method 10	Once/Term
	CO	#4 and/or #6 Oil/Used Oil Usage	MMBtu	9.6000E-2	lb/MMBtu	Method 10 if throughput >50% of PSEL calculation basis in any year, or if actual throughput < 50% then recordkeeping & fuel emission factor calculation.	Once/term if oil usage > 50% of PSEL throughput calculation in any year., otherwise not required, Condition 187.d
	NO _x	Natural Gas Usage	MMBtu	Formula utilized as per Condition 186.g	lb/MMBtu	Method 7E	Once/Term
	NO _x	#4, #2 and/or #6 Oil	MMBtu	4.20E-1	lb/MMBtu	Method 7E or equivalent if throughput >50% of PSEL calculation basis in any year, or if actual throughput < 50% then recordkeeping & fuel emission factor calculation.	Once/term if oil usage > 50% of PSEL throughput calculation in any year, otherwise not required Condition 187.d
	NO _x	Used Oil	MMBtu	4.20E-1	lb/MMBtu	Recordkeeping and fuel emission factor calculation or Condition 187.d	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition187)	Frequency
	PM/PM ₁₀ /PM _{2.5}	Natural Gas Usage	MMBtu	*2.500E-3	lb/MMBtu	Not Required	
	PM/PM ₁₀ /PM _{2.5}	#4 and/or #6 Oil	MMBtu	0.128/0.110/0.0748	lb/MMBtu	Not Required	
	PM/PM ₁₀ /PM _{2.5}	Used Oil	MMBtu	1.6E-1/1.6E-1/0.0748	lb/MMBtu	Not Required	
	Pb	#4 and/or #6 Oil	MMBtu	1.00E-5	lb/MMBtu	Not Required	
	Pb	Used Oil	MMBtu	2.8E-3	lb/MMBtu	Not Required	
	SAM	#4 and/or #6 Oil	MMBtu	3.96E-2	lb/MMBtu	Not Required	
	SAM	Used Oil	MMBtu	3.000E-2	lb/MMBtu	Not Required	
	SO ₂	Natural Gas Usage	MMBtu	6.000E-4	lb/MMBtu	Not Required	
	SO ₂	#2 Oil	MMBtu	5.05E-1	lb/MMBtu	Method 6 or 6C or material balance	Annually
	SO ₂	#4 and/or #6 Oil	MMBtu	1.84	lb/MMBtu	Method 6 or 6C or material balance	Annually
	SO ₂	Used Oil	MMBtu	8.4E-1	lb/MMBtu	Method 6 or 6C or material balance	Annually
	VOC as propane	Natural Gas Usage	MMBtu	1.700E-3	lb/MMBtu	Not Required	
	VOC as propane	#2 Oil	MMBtu	2.20E-3	lb/MMBtu	Not Required	
	VOC as propane	#4 and/or #6 Oil	MMBtu	6.140E-3	lb/MMBtu	Not Required	
	VOC as propane	Used Oil	MMBtu	1.73E-3	lb/MMBtu	Not Required	
EU-150B	CO	Natural Gas Usage	MMBtu	1.40E-1	lb/MMBtu	Method 10	Once/Term
Package Boiler	CO	#2 Oil/Used Oil Usage	MMBtu	3.210E-1	lb/MMBtu	Method 10	Once/term if oil usage > 50 % of PSEL throughput assumption in any calendar year of term, where 50% level equals 130,600 MM BTU/year, or 926,000 gal No.2 Fuel Oil, based on year 2000 Title V Application..

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition187)	Frequency
	NO _x	Natural Gas Usage	MMBtu	2.000E-1	lb/MMBtu	CEMS Data	Continuously
	NO _x	#2 Oil/Used Oil Usage	MMBtu	2E-1	lb/MMBtu	CEMS Data	Continuously
	Pb	#2 Oil	MMBtu	1E-5	lb/MMBtu	Not Required	
	Pb	Used Oil	MMBtu	3E-3	lb/MMBtu	Not Required	
	PM/PM ₁₀ /PM _{2.5}	Natural Gas Usage	MMBtu	*5.00E-3	lb/MMBtu	Not Required	
	PM/PM ₁₀ /PM _{2.5}	#2 Oil	MMBtu	4.0E-02/4.0E-02/2.68E-02	lb/MMBtu	Not Required (see Condition 159.a)	No further testing required per Condition 159.a
	PM/PM ₁₀ /PM _{2.5}	Used Oil	MMBtu	1.6E-01/1.6E-01/1.09E-01	lb/MMBtu	Not Required (see Condition 159.a)	No further testing required per Condition 159.a
	SAM	#2 Oil	MMBtu	2E-2	lb/MMBtu	Not Required	
	SAM	Used Oil	MMBtu	3E-2	lb/MMBtu	Not Required	
	SO ₂	Natural Gas Usage	MMBtu	6.000E-4	lb/MMBtu	Not Required	
	SO ₂	#2 Oil/Used Oil Usage	MMBtu	5.6E-1	lb/MMBtu	Method 6 or 6C or material balance	Annually
	VOC as propane	Natural Gas Usage	MMBtu	1.037E-2	lb/MMBtu	Not Required	
	VOC as propane	#2 Oil/Used Oil Usage	MMBtu	2.200E-2	lb/MMBtu	Not Required	
EU-185 ETS FU185-000	VOC as propane	Pulp - Unbleached	adt	9.869E-2 1.20E-1 as propane	lb/adt	Not Required	
	TRS	Paper	adt	8.26E-4	lb/adt	Not Required	
EU-275A Road Fugitives	PM/PM ₁₀ /PM _{2.5}	Hours of Operation	hours	1.32/3.55E-1/3.55E-02	lb/hr-opr	Not Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition 187)	Frequency
EU-275C Other Source TRS FU401-098	VOC _{as propane} Controlled	Pulp - Unbleached	adt	0.2466	lb/adt	EPA Method 25A for VOC as propane -Concurrent Testing on Condenser Inlet and Outlet (Percent Efficiency)	Once by December 31, 2017 (in addition to 5/8/15 testing)
	VOC _{as propane} Uncontrolled	Pulp - Unbleached	adt	5.430	lb/adt	EPA Method 25A for VOC as propane	Once by December 31, 2017 (in addition to 5/8/15 testing)
	TRS	Pulp - Unbleached	adt	0.001110	lb/adt	Method 16, 16A, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141.
PS410-999	TRS	Pulp - Unbleached	adt	4.210E-2	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC _{as propane}	Pulp - Unbleached	adt	1.75E-1	lb/adt	Not Required	
PS420-999	TRS	Pulp - Unbleached	adt	0.0549	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC _{as propane}	Pulp - Unbleached	adt	1.122	lb/adt	Not Required	
TA186-120	TRS	Pulp - Unbleached	adt	1.310E-3	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC _{as propane}	Pulp - Unbleached	adt	6.050E-3	lb/adt	Not Required	
TA440-003	TRS	Pulp - Unbleached	adt	1.500E-2	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC _{as propane}	Pulp - Unbleached	adt	6.185E-2	lb/adt	Not Required	
TA440-004	TRS	Pulp - Unbleached	adt	6.19-E-4	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC _{as C}	Pulp - Unbleached	adt	1.830E-3	lb/adt	Not Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition187)	Frequency
TA440-067 TA441-050 TA445-300	TRS	Pulp - Unbleached	adt	4.400E-2	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	SO ₂	Pulp - Unbleached	adt	2.000E-2	lb/adt	Not Required	
	VOC as propane	Pulp - Unbleached	adt	8.54E-2	lb/adt	Not Required	
	TRS	Pulp - Unbleached	adt	3.200E-2	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	SO ₂	Pulp - Unbleached	adt	2.000E-2	lb/adt	Not Required	
	VOC as propane	Pulp - Unbleached	adt	9.289E-3	lb/adt	Not Required	
	CO	Pulp - Unbleached	adt	5.990E-4	lb/adt	Not Required	
	TRS	Pulp - Unbleached	adt	4.200E-3	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
TA445-530	VOC as propane	Pulp - Unbleached	adt	2.586E-3	lb/adt	Not Required	
	CO	Pulp - Unbleached	adt	1.380E-4	lb/adt	Not Required	
	TRS	Pulp - Unbleached	adt	1.730E-3	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC as propane	Pulp - Unbleached	adt	2.590E-3	lb/adt	Not Required	
EU-275D Additional Other Source TRS w/Title V EQ420-070 EQ455-009	TRS	Pulp - Unbleached	adt	0.000580	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC as propane	Pulp - Unbleached	adt	0.0023	lb/adt	Not Required	
	PM/PM ₁₀	Pulp - Unbleached	adt	6E-3/5E-3	lb/adt	Not Required	
	TRS	Pulp - Unbleached	adt	2.650E-3	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition187)	Frequency
EQ-456-008	VOC _{as propane}	Pulp - Unbleached	adt	3.820E-2	lb/adt	Not Required	
	PM/PM ₁₀	Pulp - Unbleached	adt	4.72E-3/4.22E-3	lb/adt	Not Required	
	TRS	Pulp - Unbleached	adt	1.230E-3	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
FA400-084	VOC _{as propane}	Pulp - Unbleached	adt	4.440E-2	lb/adt	Not Required (not quantifiable)	
	TRS	Pulp - Unbleached	adt	8.600E-2	lb/adt	Method 16, 16a, or 16B	Annually if > 3%/10% per Condition 141
	VOC _{as propane}	Pulp - Unbleached	adt	4.88E-1	lb/adt	Not Required	
TA186-140	TRS	Pulp - Unbleached	adt	4.15E-2	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
TA420-014	VOC _{as propane}	Pulp - Unbleached	adt	5.856E-3	lb/adt	Not Required	
	TRS	Pulp - Unbleached	adt	2.500E-3	lb/at	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC _{as propane}	Pulp - Unbleached	adt	5.86E-3	lb/adt	Not Required	
TA443-082	TRS	Pulp - Unbleached	adt	5.200E-3	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
TA455-007	VOC _{as propane}	Pulp - Unbleached	adt	1.098E-2	lb/adt	Not Required	
	PM/PM ₁₀	Pulp - Unbleached	adt	8.96E-3/8.02E-3	lb/adt	Not Required	
	TRS	Pulp - Unbleached	adt	1.19E-2	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
TA455-010	VOC _{as propane}	Pulp - Unbleached	Adt	1.46E-5	lb/adt	Not Required	
	TRS	Pulp - Unbleached	adt	4.17E-4	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC _{as propane}	Pulp - Unbleached	adt	3.90E-3	lb/adt	Not Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition 187)	Frequency
TA455-014	TRS	Pulp - Unbleached	adt	7.92E-4	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC as propane	Pulp - Unbleached	adt	2.56E-3	lb/adt	Not Required	
TA456-007	PM/PM ₁₀	Pulp - Unbleached	adt	0.00704/0.00630	lb/adt	Not Required	
	TRS	Pulp - Unbleached	adt	1.46E-2	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
TA456-011	VOC as propane	Pulp - Unbleached	adt	6.620E-2	lb/adt	Method 25A, 25B (if taken out of service, then not required)	Once/term (if taken out of service, then not required)
	TRS	Pulp - Unbleached	adt	8.2E-3	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC as propane	Pulp - Unbleached	adt	3.172E-4	lb/adt	Not Required (already tested)	None
TA456-013	TRS	Pulp - Unbleached	adt	1.130E-5	lb/adt	Method 16, 16a, or 16B (Condition 141)	Annually if > 3%/10% per Condition 141
	VOC as propane	Pulp - Unbleached	adt	9.028E-5	lb/adt	Not Required (already tested)	None
EU-310 Chip Handling FU310-999	PM/PM ₁₀ / PM _{2.5}	Pulp - Unbleached	adt	8.87E-3/4.19E-3/2.1E-03	lb/adt	Not Required	None
	VOC as propane	Pulp - Unbleached	adt	5.57E-1 as propane	lb/adt	Not Required	None
EU-320 Chip Storage FU320-999	PM/PM ₁₀ / PM _{2.5}	Pulp - Unbleached	adt	6.3E-3/2.99E-3/4.49E-4	lb/adt	Not Required	
	VOC as propane	Pulp - Unbleached	adt	9.76E-3 as propane	lb/adt	Not Required	
EU-330 Fines System	PM	Fines – Bone Dry Tons (BDT)	BDT	0.1	lb/BDT	Not Required	
	PM ₁₀	Fines – Bone Dry Tons (BDT)	BDT	0.095	lb/BDT	Not Required	
	PM _{2.5}	Fines – Bone Dry Tons (BDT)	BDT	0.08	lb/BDT	Not Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition187)	Frequency
	VOC	Fines – Bone Dry Tons (BDT)	BDT	0.049 as propane	lb/BDT	Not Required	
EU-402 New Fiber Line FU402-100	PM/PM ₁₀ /PM _{2.5}	Pulp - New Fiber	adt	0.0490/0.0230/3.45E-03	lb/adt	Not Required	
FU402-101	PM/PM ₁₀ /PM _{2.5}	Pulp - New Fiber	adt	0.0490/0.0230/3.45E-03	lb/adt	Not Required	
FU402-350	VOC as propane	Pulp - New Fiber	adt	4.721E-2	lb/adt	Not Required	
PS402-300	VOC as propane	Pulp - New Fiber	adt	5.40E-2	lb/adt	Not Required	
PS402-400	VOC as propane	Pulp - New Fiber	adt	3.68E-2	lb/adt	Not Required	
PS402-401	NO _x	Pulp - New Fiber	adt	2.72E-1	lb/adt	Not Required	
PS402-401	CO	Pulp - New Fiber	adt	3.96	lb/adt	Method 10	Once/Term
PS402-401	VOC as carbon	Pulp - New Fiber	adt	7.503E-01	lb/adt	Method 10	Once/Term
TA402-221	NO _x	Pulp - New Fiber	adt	1.810E-1	lb/adt	Method 7E	Once/Term
	PM/PM ₁₀ /PM _{2.5}	Pulp - New Fiber	adt	4.77/4.77/7.16E-01	lb/adt	DEQ Method 5	Twice/Term
	SO ₂	Pulp - New Fiber	adt	8.210E-4	lb/adt	Not Required	
	VOC as propane	Pulp - New Fiber	adt	3.599E-1	lb/adt	Method 25A, 25B	Once/Term
	CO	Pulp -New Fiber	adt	6.700E-2	lb/adt	Not Required	
	TRS	Pulp - New Fiber	adt	1.276E-4	lb/adt	Not Required	
	VOC as propane	Pulp - New Fiber	adt	5.61E-3	lb/adt	Not Required	
TA402-999	VOC as propane	Pulp - New Fiber	adt	1.02E-1	lb/adt	Not Required	None
EU-410 Batch Digesters	VOC as propane	Pulp - Unbleached	adt	3.28E-3	lb/adt	Not Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see <i>Condition187</i>)	Frequency
TA400-002							
TA410-045	VOC _{as propane}	Hours of Operation	hours	2.350E-1	lb/adt	Not Required	
TA410-046	VOC _{as propane}	Pulp - Unbleached	adt	2.68E-4	lb/adt	Not Required	
TA410-058	VOC _{as propane}	Pulp - Unbleached	adt	1.62E-2	lb/adt	Not Required	
EU-420 Kamyr Digester EQ420-050	VOC _{as propane}	Pulp - Unbleached	adt	0.0233	lb/adt	Not Required	
TA420-035	VOC _{as propane}	Pulp - Unbleached	adt	0.0074	lb/adt	Not Required	
TA420-037	VOC _{as propane}	Pulp - Unbleached	adt	0.01	lb/adt	Not Required	
TA420-045	VOC _{as propane}	Pulp - Unbleached	adt	0.03	lb/adt	Not Required	
TA420-059	VOC _{as propane}	Pulp - Unbleached	adt	0.012	lb/adt	Not Required	
	CO	Pulp - Unbleached	adt	0.00265	lb/adt	Not Required	
TA420-109	VOC _{as propane}	Pulp - Unbleached	adt	0.01	lb/adt	Not Required	
EU-440 Evap/Rec Tank FU441-999	PM/PM ₁₀ /PM _{2.5}	Pulp - Unbleached	adt	2.080E-3/1.870E-3/9.35E-04	lb/adt	Not Required	
TA155-020	VOC _{as propane}	Pulp - Unbleached	adt	0.00074	lb/adt	Not Required	
TA445-001	CO	Pulp - Unbleached	adt	3.130E-5	lb/adt	Not Required	
	VOC _{as propane}	Pulp - Unbleached	adt	5.88E-4	lb/adt	Not Required	
TA445-002	CO	Pulp - Unbleached	adt	3.430E-5	lb/adt	Not Required	
	VOC _{as propane}	Pulp - Unbleached	adt	6.44E-4	lb/adt	Not Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition187)	Frequency
TA445-651	CO	Pulp - Unbleached	adt	2.500E-4	lb/adt	Not Required	
	VOC as propane	Pulp - Unbleached	adt	4.64E-3	lb/adt	Not Required	
EU-445A Rec #3 (EQ445-014)	CO	Pulp - Unbleached	adt	0.12	lb/adt	Method 10	Once/Term
	CO	Natural Gas	MMBtu	8.7E-2	Lb/MMBtu	Method 10	Once/Term
	NO _x	Pulp - Unbleached	adt	1.22	lb/adt	Method 7E	Once/Term
	NO _x	Natural Gas Usage	MMBtu	2.733E-1	lb/MMBtu	Not Required	
	NO _x	#6 Oil Usage	MMBtu	3.10E-1	lb/MMBtu	Not Required	
	PM/PM ₁₀ /PM _{2.5}	Pulp - Unbleached	adt	1.03/0.827/7.44E-01	lb/adt	DEQ Method 5 per Condition 83	3 mos or 6 mos per Condition 83
	SAM	#6 Oil Usage	MMBtu	8.000E-2	lb/MMBtu	Not Required	
	SAM	Pulp - Unbleached	adt	1.140E-2	lb/adt	Not Required	
	SO ₂	Natural Gas Usage	MMBtu	6.000E-4	lb/MMBtu	Not Required	
	SO ₂	#6 Oil Usage	MMBtu	1.82	lb/MMBtu	Not Required	
	SO ₂	Pulp - Unbleached	adt	3.8	lb/adt	Method 6 or 6C or CEMs (see Condition 86)	Once/Month (see Condition 86)
	TRS	Pulp - Unbleached	adt	1.2E-1	lb/adt	CEMS data (see Condition 81)	Continuously
	VOC as propane	Pulp-Unbleached	adt	1.56E-1	lb/adt	Not Required (tested already)	
EU-445B #3 SDT East (TA445-038)	NO _x	Pulp - Unbleached	adt	2.750E-2	lb/adt	Not Required	
	PM/PM ₁₀ /PM _{2.5}	Pulp - Unbleached	adt	1.690E-1/1.270E-1/1.38E-01	lb/adt	DEQ Method 5 (see Condition 136)	3 mos/6 mos (see Condition 136)
	SO ₂	Pulp - Unbleached	adt	3.000E-2	lb/adt	Not Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition 187)	Frequency
	TRS	Pulp - Unbleached	adt	1.660E-2	lb/adt	Method 16, 16a, or 16B (See Condition 136)	3 mos/6 mos (see Condition 136)
	VOC _{as propane}	Pulp - Unbleached	adt	4.758E-2	lb/adt	Not Required	
EU-445B # 3 SDT West (TA445-045)	NO _x	Pulp - Unbleached	adt	2.750E-2	lb/adt	Not Required	
	PM/PM ₁₀ /PM _{2.5}	Pulp - Unbleached	adt	1.42E-1/1.270E-1/1.38E-01	lb/adt	DEQ Method 5 sSee Condition 136)	3 mos/6 mos (see Condition 136)
	SO ₂	Pulp - Unbleached	adt	3.000E-2	lb/adt	Not Required	
	TRS	Pulp - Unbleached	adt	2.750E-2	lb/adt	Method 16, 16a, or 16B (See Condition 136)	3 mos/6 mos (see Condition 136)
	VOC _{as propane}	Pulp - Unbleached	adt	4.758E-2	lb/adt	Not Required	
EU-445C Rec #4 (EQ445-321)	CO	Natural Gas Usage	MmBtu	8.7E-2	Lb/MMBtu	Method 10	Once/Term
	CO	Pulp - Unbleached	adt	1.28	lb/adt	Method 10	Once/Term
	NO _x	Pulp - Unbleached	adt	1.53	lb/adt	Method 7E	Once/Term
	NO _x	Natural Gas Usage	MMBtu	2.733E-1	lb/MMBtu	Not Required	
	NO _x	#6 Oil Usage	MMBtu	4.430E-1	lb/MMBtu	Not Required	
	PM/PM ₁₀ /PM _{2.5}	Pulp - Unbleached	adt	0.55/4.95E-01/4.95E-01	lb/adt	DEQ Method 5 (see Condition 98)	3 Mos or 6 Mos (See Condition 98)
	SAM	#6 Oil Usage	MMBtu	3.3E-2	lb/MMBtu	Not Required	
	SAM	Pulp - Unbleached	adt	5.700E-2	lb/adt	Not Required	
	SO ₂	#6 Oil Usage	MMBtu	1.82	lb/MMBtu	Not Required	
	SO ₂	Pulp - Unbleached	adt	0.3	lb/adt	Method 6 Or 6C or CEMS (see Condition 101)	Once/Month (see Condition 101)
	TRS	Pulp - Unbleached	adt	1.2E-1	lb/adt	CEMS Data (see Condition 96)	Continuously (See Condition 96)

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition187)	Frequency
	VOC as propane	Pulp - Unbleached	adt	1.39E-1	lb/adt	Not Required	
EU-445D #4 SDT (TA445-350)	NO _x	Pulp - Unbleached	adt	4.01E-2	lb/adt	Method 7E	Once/term
	PM/PM ₁₀ /PM _{2.5}	Pulp - Unbleached	adt	1.6E-1/1.6E-1/1.46E-01	lb/adt	DEQ Method 5	3 mos/6 mos
	SO ₂	Pulp - Unbleached	adt	1.832E-2	lb/adt	Method 6 Or 6C	Once/term
	TRS	Pulp - Unbleached	adt	6.700E-2	lb/adt	Method 16, 16a, or 16B	3 mos/6 mos
	VOC as propane	Pulp - Unbleached	adt	9.516E-2	lb/adt	Not Required	None
EU-455 Lime Kilns (PS455-999)	CO	Pulp - Unbleached	adt	2.0E-1	lb/adt	Method 10	Once/Term
	NO _x	Pulp - Unbleached	adt	2.400E-1	lb/adt	Method 7E	Once/Term
	PM/PM ₁₀ /PM _{2.5}	Pulp - Unbleached	adt	7.2E-2/7.2E-2/6.77E-02	lb/adt	DEQ Method 5 (see Condition 127)	6 mos. (see Condition 127)
	Pb	Pulp - Unbleached	adt	2.360E-5	lb/adt	Not Required	
	SAM	Pulp - Unbleached	adt	6.7E-3	lb/adt	Not Required	
	SO ₂	Pulp - Unbleached	adt	5.73E-1	lb/adt	Method 6 or 6C or CEM	Twice/Term
	TRS	Pulp - Unbleached	adt	3E-2	lb/adt	CEMS data (see Condition 124)	Continuously (see Condition 124)
	VOC as propane	Pulp - Unbleached	adt	1.464E-2	lb/adt	Not Required	
EU-456 Recaust System FU456-999A GE454-052 GE455-153	PM/PM ₁₀ /PM _{2.5}	Pulp - Unbleached	adt	0.0052/0.0047/2.35E-03	lb/adt	Not Required	
	VOC as propane	Pulp-Unbleached	adt	9.39E-04	lb/adt	Not Required	
	VOC as propane	Pulp - Unbleached	adt	1.421E-02	lb/adt	Not Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (<i>see Condition187</i>)	Frequency
PU455-056	VOC _{as propane}	Pulp - Unbleached	adt	3.538E-04	lb/adt	Not Required	
TA454-016	VOC _{as propane}	Pulp - Unbleached	adt	2.318E-04	lb/adt	Not Required	
TA454-099	VOC _{as propane}	Pulp - Unbleached	adt	4.67E-04	lb/adt	Not Required	
TA454-100	VOC _{as propane}	Pulp - Unbleached	adt	4.67E-04	lb/adt	Not Required	
TA455-001	VOC _{as propane}	Pulp - Unbleached	adt	1.464E-03	lb/adt	Not Required	
TA455-012	VOC _{as propane}	Pulp - Unbleached	adt	6.71E-06	lb/adt	Not Required	
TA455-018	VOC _{as propane}	Pulp - Unbleached	adt	1.464E-03	lb/adt	Not Required	
TA455-025	VOC _{as propane}	Pulp - Unbleached	adt	4.148E-04	lb/adt	Not Required	
TA455-050	VOC _{as propane}	Pulp - Unbleached	adt	4.514E-03	lb/adt	Not Required	
TA455-158	VOC _{as propane}	Pulp - Unbleached	adt	1.196E-04	lb/adt	Not Required	
TA455-165	VOC _{as propane}	Pulp - Unbleached	adt	7.174E-06	lb/adt	Not Required	
TA456-001	VOC _{as propane}	Pulp - Unbleached	adt	1.464E-03	lb/adt	Not Required	
TA456-009	VOC _{as propane}	Pulp - Unbleached	adt	7.320E-04	lb/adt	Not Required	
TA456-015	VOC _{as propane}	Pulp - Unbleached	adt	1.061E-04	lb/adt	Not Required	
TA456-020	VOC _{as propane}	Pulp - Unbleached	adt	1.464E-03	lb/adt	Not Required	
TA456-027	VOC _{as propane}	Pulp - Unbleached	adt	1.220E-03	lb/adt	Not Required	
TA456-028	VOC _{as propane}	Pulp - Unbleached	adt	4.148E-04	lb/adt	Not Required	
TA456-028A	VOC _{as propane}	Pulp - Unbleached	adt	9.882E-04	lb/adt	Not Required	
TA456-036	VOC _{as propane}	Pulp - Unbleached	adt	4.148E-04	lb/adt	Not Required	
TA456-128	VOC _{as propane}	Pulp - Unbleached	adt	9.33E-04	lb/adt	Not Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see <i>Condition187</i>)	Frequency
EU-600 Paper Recycle FA601-121 FA601-255 TA601-012 TA601-134 TA601-142 TA601-167	VOC as propane	OCC	adt	2.07E-02	lb/adt	Not Required	
	VOC as propane	OCC	adt	7.66E-03	lb/adt	Not Required	
	VOC as propane	OCC	adt	1.15E-03	lb/adt	Not Required	
	TRS	Hours of Operation	hours	6.900E-4	lb/hr-opr	Not Required	
	VOC as propane	Hours of Operation	hours	1.745E-1	lb/hr-opr	Not Required	
	TRS	Hours of Operation	hours	3.450E-4	lb/hr-opr	Not Required	
	VOC as propane	Hours of Operation	hours	2.62E-2	lb/hr-opr	Not Required	
	TRS	OCC	adt	5.250E-4	lb/adt	Not Required	
	VOC as propane	OCC	adt	2.96E-2	lb/adt	Not Required	
EU-715A #2 MR - Wet FA705-032 FA705-107 FA705-174 FU710-999 PS715-999A	TRS	Paper	Adt	2.640E-4	lb/adt	Not Required	
	VOC as propane	Paper	Adt	1.95E-2	lb/adt	Not Required	
	TRS	Paper	Adt	2.980E-5	lb/adt	Not Required	
	VOC as propane	Paper	Adt	3.404E-3	lb/adt	Not Required	
	TRS	Paper	Adt	1.490E-7	lb/adt	Not Required	
	VOC as propane	Paper	Adt	1.72E-4	lb/adt	Not Required	
	PM/PM ₁₀ /PM _{2.5}	Paper	Adt	1.320E-2/1.320E-2/6.6E-03	lb/admt	Not Required	
	TRS	Paper	Adt	1.190E-2	lb/adt	Not Required	
	VOC as propane	Paper	Adt	3.892E-1	lb/adt	Not-Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (see Condition187)	Frequency
TA705-002	TRS	Hours of Operation	hours	1.500E-3	lb/hr-opr	Not Required	
	VOC as propane	Hours of Operation	hours	1.16E-1	lb/hr-opr	Not Required	
TA705-003	TRS	Hours of Operation	hours	5.000E-3	lb/hr-opr	Not Required	
	VOC as propane	Hours of Operation	hours	3.77E-1	lb/hr-opr	Not Required	
TA705-093	TRS	Hours of Operation	hours	1.500E-3	lb/hr-opr	Not Required	
	VOC as propane	Hours of Operation	hours	1.16E-1	lb/hr-opr	Not Required	
TA705-094	TRS	Hours of Operation	hours	1.720E-1	lb/hr-opr	Not Required	
	VOC as propane	Hours of Operation	hours	3.86	lb/hr-opr	Sample and test for machine whitewater system methanol concentration. Emission factor assumes liquid methanol concentration less than 67ppm.	Once per year during first permit term.
TA705-099	TRS	Hours of Operation	hours	3.370E-1	lb/hr-opr	Not Required	
	VOC as propane	Hours of Operation	hours	3.86	lb/hr-opr	Sample and test for machine whitewater system methanol concentration. Emission factor assumes liquid methanol concentration less than 67ppm.	Once per year during first permit term.
TA705-130	TRS	Hours of Operation	hours	1.720E-10E-1	lb/hr-opr	Not Required	
	VOC as propane	Hours of Operation	hours	3.86	lb/hr-opr	Sample and test for machine whitewater system methanol concentration. Emission factor assumes liquid methanol concentration less than 67ppm.	Once per year during first permit term.
TA705-208	TRS	Hours of Operation	hours	3.000E-3	lb/hr-opr	Not Required	
	VOC as propane	Hours of Operation	hours	2.24E-1	lb/hr-opr	Not Required	
TA705-215	TRS	Hours of Operation	hours	1.500E-3	lb/hr-opr	Not Required	

EU ID	Pollutant	Process Parameter	Units	Annual EF	Units	Test Methods (<i>see Condition187</i>)	Frequency
	VOC _{as propane}	Hours of Operation	hours	1.12E-1	lb/hr-opr	Not Required	
EU-715B #2 MR – Dry FA730-104	PM/PM ₁₀ /PM _{2.5}	Paper	adt	1.548E-3/1.548E-3/7.74E-04	lb/adt	Not Required	
PS715-999B	TRS	Paper	adt	1.460E-2	lb/adt	Not Required	
	VOC _{as propane}	Paper	adt	3.892E-1	lb/adt	Not Required	
VA730-025	PM/PM ₁₀ /PM _{2.5}	Paper	adt	4.190E-4/4.190E-4/2.10E-04	lb/adt	Not Required	

- 186.b. For the emissions units listed in the table above (Table 27), the permittee shall determine compliance with the annual 12-month rolling PSELs for all pollutants except GHGs by multiplying the process parameter by the emission factor listed above for each pollutant with the exception of calculations provided for in Conditions 186.c, 186.d, 186.e, and 186.f.

$$E = (P_{eu} \times EF_{eu}) / k$$

where:

E	=	Emissions, or tons/year
P _{eu}	=	Process parameter for each emissions unit/units/year
EF _{eu}	=	Emission factor for each emissions unit, pounds/units
k	=	Conversion factor, (1 lb/lb, 2000 lbs/ton)

- 186.c. In determining compliance with the annual 12-month rolling PSELs, the permittee shall determine emissions attributable to the burning of liquid fuel oil using a material balance with the following equation to calculate the SO₂ emissions:

$$E = 2SF$$

where:

E	=	emissions of sulfur dioxide tons/year;
S	=	sulfur content, (wt/wt) (as determined by Condition 18)
F	=	fuel used, lbs/day or tons/yr; and
2	=	<u>64 lbs SO₂/mole</u> 32 lbs S/mole

- 186.d. The real-time TRS CEM data for emissions units EU-445A, EU-445C and EU-455 shall be incorporated into the TRS emissions calculation performed in accordance with Condition 186.b for monitoring compliance with the facility-wide TRS PSEL.
- 186.e. The real-time NO_x CEM data for emissions unit EU-150B shall be incorporated into the NO_x emissions calculation performed in accordance with Condition 186.b for monitoring compliance with the facility-wide NO_x PSEL.
- 186.f. The real-time SO₂ CEM data for emissions units EU-445A, EU-445C and EU-455 may be incorporated into the SO₂ emissions calculation performed in accordance with Condition 186.b for monitoring compliance with the facility-wide SO₂ PSEL, if the permittee chooses the monitoring alternative under Conditions 86.d, 101.c, or 123, and the CGA (cylinder gas audit) and RATA (relative accuracy test audit) and data availability requirements are satisfied for this monitoring method.
- 186.g. Continuous Parameter Monitoring System Formula to calculate NO_x lb/mmbtu from natural gas firing rate:

If Natural Gas Flow ≤ 380 MSCF/Hr,

then NO_x lb/mmbtu = 0.000383 * MSCF/Hr + 0.1047,

otherwise if the Natural Gas flow (or anytime six (6) burners are utilized) > 380 MSCF/Hr

then NO_x lb/mmbtu = 0.0003757 * MSCF/Hr + 0.2987

187. The permittee shall conduct emission factor verification tests in accordance with ODEQ's *Source Sampling Manual* and the source test plan approved by LRAPA for the PM, CO, NO_x, SO₂, and VOC emission

factors listed for emissions units using the test methods and minimum test frequencies listed above in Condition 186.a. The results of the emission factor verification tests may be used to correct baseline or PSELs if more accurate data is obtained. [LRAPA Title 12 "Baseline Emission Rate"] Some of the testing included in Condition 186 Table 32, under test methods or frequency is provided to allow the use of compliance monitoring required elsewhere in the conditions of this permit to satisfy the PSEL verification testing monitoring requirements. Those conditions are identified in the table. Where Table 27 in Condition 186.a summarizes monitoring requirements from elsewhere in this permit, that summary is not intended to add duplicate testing. [OAR 340-218-0050(3)(a)]

- 187.a. When more than one (1) test is required during the permit term for PSEL emission factor verification, and less than three (3) tests/term are required, the tests shall be separated by a minimum period of six (6) months.
- 187.b. Any of the testing required to determine compliance with emission limits and standards (e.g., testing required in Conditions 83, 86, 98, 101, 127, 136, 141, 146, 159, 172, 173, 187.d, and 187.f) may be used to satisfy this requirement in part or in full.
- 187.c. In the source test plan, the permittee may propose the following:
 - 187.c.i. To group similar emissions units together and source test only one (1) emissions device of the group of similar emissions units for emission factor verification testing. If the permittee determines that the emissions devices are not similar, source testing shall be done on all the emissions devices.
 - 187.c.ii. To conduct the source test at only one (1) monitoring point for an emissions unit if all monitoring points are expected to have similar emissions. If more than one (1) source test is required during the permit term, the subsequent test shall be done on a different monitoring point, if applicable.
 - 187.c.iii. To conduct a source test using an alternative method than specified in Condition 186.a. Use of alternative methods, other than those specified in Condition 186.a, are subject to approval by LRAPA.
 - 187.c.iv. If the first emission factor verification test during this permit term indicates that the actual emission rate from a source or group of sources (subject to twice per term emission factor verification tests) is less than 50% of the emission factor listed in Condition 186.a, the permittee need not perform the second emission factor verification test. If more than one (1) source test is required during the permit term, the subsequent test shall be done on a different emissions device in the group of similar emissions devices.
- 187.d. For EU-150A or EU-150B (except for Condition 187.d.iv SO₂ monitoring), the following procedures and test methods shall be used once per permit term to verify emission factors for emissions unit EU-150A at monitoring point PR150-008 and for emissions unit EU-150B at monitoring point EQ150-301, except that no further testing shall be required on EU-150A or EU-150B for PM:
 - 187.d.i. DEQ Method 5 shall be used to measure particulate matter emissions while burning oil.
 - 187.d.ii. EPA Method 10 shall be used to measure carbon monoxide emissions while burning oil.
 - 187.d.iii. EPA Method 7E or equivalent, or the NO_x CEMs shall be used to measure nitrogen oxide emissions while burning oil.
 - 187.d.iv. To measure sulfur dioxide emissions while burning oil, the permittee shall perform one (1) of the following on an annual basis regardless of the quantity of fuel oil used:
 - 187.d.iv.A. Source test using EPA Method 6 or 6C, or
 - 187.d.iv.B. Material balance using the equation and sulfur content in Condition 186.c to calculate the SO₂ emissions.

- 187.d.v. During each source test, the permittee shall record fuel type and usage, opacity, and steam production.
- 187.e. The permittee shall notify LRAPA at least 15 days prior to conducting any emission factor verification tests by submitting a source test plan in accordance with ODEQ's *Source Sampling Manual*. The permittee is not required to submit a source test plan if a plan has already been approved for the emissions unit and the pollutant to be tested.
- 187.f. Source test reports prepared in accordance with the ODEQ's *Source Sampling Manual* must be submitted to LRAPA within 60 days of completing any required source test, unless a different time period is approved in the source test plan submitted prior to the source test. The summary shall include the following information:
 - 187.f.i. Emissions unit and monitoring point identification;
 - 187.f.ii. Emission factors in the same units as in the table above;
 - 187.f.iii. Emission results in pounds per hour;
 - 187.f.iv. Process parameters during the test (e.g., material throughput, types and amounts of fuels, heat input, etc.); and
 - 187.f.v. Control device operating parameters if any.
- 188. The emissions factors listed in Condition 186.a are not enforceable limits unless otherwise specified in this permit. Compliance with PSELs shall only be determined by the calculations contained in Condition 186.b through 186.f of this permit using the measured process parameters recorded during the reporting period and the emission factors contained in Condition 186.a and the calculations in Conditions 186.b through 186.f. [OAR 340-218-0040(4)]
- 189. For compliance with annual PSELs, the permittee shall maintain a system that tracks all emissions unit PSEL calculations that comprise the facility-wide rolling 12-month and discrete calendar yearly PSELs. The system shall perform the calculations as required in Condition 186.b and perform the summation on a monthly basis, from daily estimates of actual emissions. The system and PSEL data shall be available for inspection by LRAPA personnel, and the calculations shall be documented in the permittee's *QA Manual* as required in Condition 22. The system may consist of computer tracking or by any other means documented in the permittee's *QA Manual*. Alternately the permittee may demonstrate compliance with the PSEL limitations in Condition 185 by recordkeeping on process throughputs, and demonstrating that the throughputs do not exceed the calculation basis of the PSEL limits. Emission units that do not operate for the respective time period shall not be included in the estimation of the PSEL calculations. [OAR 340-218-0050(3)]

COMPLIANCE SCHEDULE [OAR 340-218-0080(4)]

- 190. No compliance order is in effect at this time.

MONITORING REQUIREMENTS [OAR 340-218-0050(3)(a)]

The monitoring requirements are grouped into sections immediately following each emission unit section, including a group of facility-wide monitoring requirements that follow the facility-wide section.

RECORDKEEPING REQUIREMENTS [OAR 340-218-0050(3)(b)]

191. The permittee shall maintain the following general records of monitoring required by this permit as appropriate: [OAR 340-218-0050(3)(b)(A)]
 - 191.a. Date, place as defined in the permit, and time of sampling or measurements;
 - 191.b. Date(s) analyses were performed;
 - 191.c. Company or entity that performed the analyses;
 - 191.d. Analytical techniques or methods used;
 - 191.e. Results of such analyses;
 - 191.f. Operating conditions as existing at the time of sampling or measurement; and
 - 191.g. Records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibrations drift checks).
192. The permittee shall maintain the following specific records of required monitoring information: [OAR 340-218-0050(3)(b)(A)]
 - 192.a. Results for any Method 9 visible emissions monitoring;
 - 192.b. Fuel sulfur analysis results for #1, #2, ASTM Grade No. 4 and/or No. 6 oil and used oil;
 - 192.c. Records of air pollution episodes and emission reduction actions taken;
 - 192.d. Records required by 40 CFR 63, Subpart S;
 - 192.e. Log of air quality related complaints received from the public by the permittee and investigation reports for those complaints;
 - 192.f. Daily average arithmetic average TRS concentrations from EU-445A, and daily cumulative hours with concentrations greater than 10 ppm;
 - 192.g. Daily average arithmetic average TRS concentrations from EU-445C, and daily cumulative hours with concentrations greater than 5 ppm;
 - 192.h. Hourly arithmetic average oxygen concentrations from CEMS for EU-445A and EU-445C;
 - 192.i. Correlation equation and correlation coefficient for the relationship between stack flow and steam flow or stack flow and fuels firing rate for emissions unit EU-445A and EU-445C;
 - 192.j. Average daily equivalent and annual pulp production (ADMT or ADT) through EU-445A and EU-445C;
 - 192.k. Mass of dry black liquor solids burned per day in EU-445A and EU-445C;
 - 192.l. Daily TRS emissions in units of kg/ADMT(or lb/ADT) from EU-445A and EU-445C;
 - 192.m. Source test results for PM emissions in units of lb/day and kg/ADMT (or lb/ADT) from EU-445A and EU-445C;
 - 192.n. Visible emissions from emissions unit EU-445A and EU-445C as collected by the COMS including the average daily opacities, number of 6-minute averages in excess of 35%, the average opacity above 35%, and corrective action taken to address opacity exceedances;
 - 192.o. Once per month 3-hour discrete average sulfur dioxide concentrations from EU-445A and EU-445C;
 - 192.p. Daily records of the amounts and types of each fuel combusted during each day in EU-445A and EU-445C;
 - 192.q. Daily arithmetic average TRS concentrations from EU-455 and daily cumulative hours with concentrations greater than 20 ppm;

- 192.r. Hourly arithmetic average oxygen concentrations from CEMS for EU-455;
- 192.s. Correlation between stack flow, type, and amount of fuels used and other contributing parameters to stack flow for emissions unit EU-455;
- 192.t. Average daily equivalent, monthly lime mud production or fuel usage, and air-dried pulp production to calculate average daily equivalent ADMT (or ADT) pulp production for EU-455;
- 192.u. Average daily equivalent and annual pulp production (ADMT or ADT) through EU-455;
- 192.v. Daily TRS and PM emissions in units of kg/ADMT (or lb/ADT) from EU-455;
- 192.w. PM emissions from EU-455 in kg/ADMT (or lb/ADT) and gr/dscf as measured through source testing;
- 192.x. Daily records of down time of EU-455 (or EU445A or EU445C) and corrective/preventative action taken when this downtime causes NCG system venting over one (1) hour;
- 192.y. Daily records of all periods of interruption of NCG thermal oxidation;
- 192.z. Cumulative minutes that non-condensable gases are vented to the atmosphere;
- 192.aa. Preventive measures or corrective action taken as a result of switching to a thermal oxidation unit when switching causes NCG venting for more than one (1) hour per changeover;
- 192.bb. Daily records of the amounts of each fuel combusted during each day in EU455;
- 192.cc. Any records of visible emission monitoring for EU455;
- 192.dd. Occurrence of deviations from the opacity action level for the lime kiln ESP, CD 456-110, and any corrective actions taken;
- 192.ee. TRS and PM emission results for EU-445B and EU-445D in kg/ADMT(lb/ADT);
- 192.ff. Source test average scrubber operating parameters for each smelt dissolving tank scrubber, CD445-164 (#3 East DTV), CD445-162 (#3 West DTV) and CD445-164 (#4 DTV), the number of deviations from the scrubber action levels, and any corrective actions taken;
- 192.gg. Source test results for TRS emissions for the miscellaneous/other TRS sources, EU-275C and EU-275D in kg/ADMT;
- 192.hh. Results of any visible emission monitoring for EU-275C and EU-275D #1 and #3 Slakers while they continue to operate;
- 192.ii. Inspection and maintenance records on #1 and #3 Slaker Scrubbers while they continue to operate;
- 192.jj. Daily and annual records of fuel usage for emissions units EU-150A and EU-150B, and the percent of heat input provided by oil per calendar year;
- 192.kk. Any visible emissions observations for the power boiler, EU-150A;
- 192.ll. Visible emission data from EU-150B when oil is used as the fuel;
- 192.mm. Hourly average NO_x emission rates expressed in ng/J (lb/million Btu) heat input for EU-150B;
- 192.nn. Operating status records on the flue gas recirculation system for EU-150B;
- 192.oo. Results of visible emissions monitoring for Condition 17, and any corrective actions taken;
- 192.pp. Daily and annual records of fuel usage for EU-402, EU-445A, and EU-445C;
- 192.qq. Results of inspections, average hourly scrubber operating parameters, for the EU-402, device PS402-401 Wet Scrubbers, deviations from the action levels, and any corrective action taken when operating;
- 192.rr. Results of inspections and corrective actions taken for EU-402 Wet Scrubber, EU-456 #1 and #3 Slaker Wet Scrubbers until removed;

- 192.ss. Daily and annual records of pulp production through EU-410 and EU-420 (digesters);
 - 192.tt. Daily and annual records of alternative fiber production through EU-402;
 - 192.uu. Daily and annual records of days of operation for EU-410 and EU-420;
 - 192.vv. Daily and annual records of chips handled through EU-310 based on digester pulp throughput;
 - 192.ww. Daily and annual records of chips handled and stored through EU-320 based on digester pulp throughput;
 - 192.xx. Daily and annual records of paper production for EU-714A, EU-714B, EU-715A and EU-715B;
 - 192.yy. Daily and annual records of days of operation for EU-600, EU-714A and EU-715A;
 - 192.zz. Daily and annual records of OCC production for EU-600;
 - 192.aaa. Occurrence and length of downtime for all pollution control devices if any process associated with the control device continues to operate while the control device is not operating.
 - 192.bbb. Daily records and calculations required by Condition 207.
193. Unless otherwise specified by permit condition, the permittee shall make every effort to maintain 100 percent of the records required by the permit. If information is not obtained or recorded for legitimate reasons (e.g., the monitor or data acquisition system malfunctions due to a power outage, or weather conditions do not allow visible emissions monitoring for three (3) successive attempts), the missing record(s) shall not be considered a permit deviation provided the amount of data does not exceed 10% of the averaging or testing periods in a reporting period or 10% of the total operating hours in a reporting period, if no averaging time is specified. Upon discovering that a required record is missing, the permittee shall document the reason for the missing record. In addition, any missing record that can be recovered from other available information shall not be considered a missing record. [LRAPA 34-015, 35-0160, and OAR 340-218-0050(3)(b)]
194. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All existing records required by the previous Air Contaminant Discharge Permit shall be retained for five (5) years. [OAR 340-218-0050(3)(b)(B)]

REPORTING REQUIREMENTS

[OAR 340-218-0050(3)(c)]

195. Excess Emissions Reporting The permittee must report all excess emissions as follows: [LRAPA 36-001 through 36-030]
- 195.a. Immediately (within 1 hour of the event) notify LRAPA of an excess emission event by phone, e-mail, or facsimile; and
 - 195.b. Within 15 days of the excess emissions event, submit a written report that contains the following information: [LRAPA 36-025-1]
 - 195.b.i. The date and time of the beginning of the excess emissions event and the duration or best estimate of the time until return to normal operation;
 - 195.b.ii. The date and time the owner or operator notified LRAPA of the event;
 - 195.b.iii. The equipment involved;
 - 195.b.iv. Whether the event occurred during planned startup, planned shutdown, scheduled maintenance, or as a result of a breakdown, malfunction, or emergency;

- 195.b.v. Steps taken to mitigate emissions and corrective action taken, including whether the approved procedures for a planned startup, shutdown, or maintenance activity were followed;
- 195.b.vi. The magnitude and duration of each occurrence of excess emissions during the course of an event and the increase over normal rates or concentrations as determined by continuous monitoring or best estimate (supported by operating data and calculations);
- 195.b.vii. The final resolution of the cause of the excess emissions; and
- 195.b.viii. Where applicable, evidence supporting any claim that emissions in excess of technology-based limits were due to any emergency pursuant to 36-040.
- 195.c. In the event of any excess emissions which are of a nature that could endanger public health and occur during non-business hours, weekends, or holidays, the permittee must immediately notify LRAPA by calling the Oregon Accident Response System (OARs). The current number is 1-800-452-0311.
- 195.d. If startups, shutdowns, or scheduled maintenance may result in excess emissions, the permittee must submit startup, shutdown, or scheduled maintenance procedures used to minimize excess emissions to LRAPA for prior authorization, as required LRAPA 36-010 and 36-015. New or modified procedures must be received by LRAPA in writing at least 72 hours prior to the first occurrence of the excess emission event. The permittee must abide by the approved procedures and have a copy available at all times.
- 195.e. The permittee must notify LRAPA of planned startup/shutdown or scheduled maintenance events.
- 195.f. The permittee must continue to maintain a log of all excess emissions in accordance with 36-025-3. However, the permittee is not required to submit the detailed log with the semi-annual and annual monitoring reports. The permittee is only required to submit a brief summary listing the date, time, and the affected emissions units for each excess emission that occurred during the reporting period. [OAR 340-218-0050(3)(c)]
- 196. Permit Deviations Reporting: The permittee must promptly report deviations from permit requirements that do not cause excess emissions, including those attributable to upset conditions, as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" means within 15 days of the deviation. Deviations that cause excess emissions, as specified in LRAPA Title 36 must be reported in accordance with Condition 195. [OAR 340-218-0050(3)(c)]
- 197. The permittee shall report the following information within 30 days of the end of each calendar month to the LRAPA office: [LRAPA 33-070-7. LRAPA-only enforceable]
 - 197.a. Daily average emissions of TRS gases expressed in parts per million of H₂S on a dry gas basis with oxygen concentrations, if oxygen corrections are required, from emissions units EU-445A, EU-445C and EU-455;
 - 197.b. Daily average emissions of TRS gases in pounds of total reduced sulfur per equivalent ton of pulp processed (kg/ADMT or lb/adt), expressed as H₂S from emissions units EU-445A, EU-445C and EU-455;
 - 197.c. Maximum daily 3-hour average emissions of SO₂ based on all samples collected during one (1) sampling period from the recovery furnaces, EU-445A and EU-445C, expressed as ppm, dry basis;
 - 197.d. Number of 6-minute average opacities from the recovery furnace combined stack that exceed 35% opacity, and all daily average opacities from the recovery furnace combined stack;
 - 197.e. Daily average pounds of particulate matter per equivalent ton of pulp produced for each recovery furnace EU-445A and EU-445C based on source test results;

- 197.f. Results of the last two (2) recovery furnace particulate matter source tests (grains per dry standard cubic foot), the stack flow rate (dscfm), and for the same source test period, the hourly average opacity;
 - 197.g. The permittee shall include the discrete 24-hour averages in the monthly report as required by Condition 209, and
 - 197.h. All periods of non-condensable gas bypass.
 - 197.i. Daily calculations required by Condition 207.
198. The permittee must submit three (3) copies of reports of any required monitoring at least every 6 months, completed on forms approved by LRAPA. Six month periods are January 1 to June 30, and July 1 to December 31. One copy of the report must be submitted to the EPA and two copies to the LRAPA office. All instances of deviations from permit requirements must be clearly identified in such reports: [OAR 340-218-0050(3)(c)(A) and 340-218-0080(6)(d)]
- 198.a. The first semi-annual report is due on August 15 and must include the semi-annual compliance certification, OAR 340-218-0080.
 - 198.b. The annual report is due on March 15 and shall include the items required by Condition 202:
199. The semi-annual compliance certification must include the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable): [OAR 340-218-0080(6)(c)]
- 199.a.i. The identification of each term or condition of the permit that is the basis of the certification;
 - 199.a.ii. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means include, at a minimum, the methods and means required under OAR 340-218-0050(3). *Note: Certification of compliance with the monitoring conditions in the permit is sufficient to meet this requirement, except when the permittee must certify compliance with new applicable requirements that are incorporated by reference. When certifying compliance with new applicable requirements that are incorporated by reference, the permittee must provide the information required by this condition.* If necessary, the owner or operator also must identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the FCAA, which prohibits knowingly making a false certification or omitting material information;;
 - 199.a.iii. The status of compliance with permit terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Condition 179a.ii. The certification must identify each deviation and take it into account in the compliance certification. The certification must also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance, as defined under LRAPA 36-005 occurred;
 - 199.a.iv. Such other facts as LRAPA may require to determine the compliance status of the source.
 - 199.a.v.
200. Notwithstanding any other provision contained in any applicable requirement, the owner or operator may use monitoring as required under OAR 340-218-0050(3) and incorporated in to the permit, in addition to any specified compliance methods, for the purpose of submitting compliance certifications. [OAR 340-218-0080(6)(e)]

201. To comply with the reporting requirements for EU-150B (Package Boiler) as required per NSPS Subpart Db, including the requirements of 40 CFR 60 Subpart Db, Section 60.49(b), and Subpart A, Section 60.7(c), (d), and (e), the permittee shall do the following:
- 201.a. The permittee shall keep daily records including date, hourly average ppm nitrogen oxides, and 30-day rolling average nitrous oxides as per Condition 161.
 - 201.b. The permittee shall maintain and report excess emissions of NO_x (all fuels) or opacity (liquid fuels only) on a quarterly basis, including reasons for the excess emissions, if they were associated with a startup, shutdown or malfunction, and corrective actions taken as per Conditions 195, 196, and 197.
 - 201.c. The permittee shall provide recordkeeping to demonstrate compliance with the SO₂ emission standards under 40 CFR 60 Subpart Db, Section 60.42b(j)(2) and 60.49b(r), by maintaining fuel receipts to document the use of only very low sulfur oil and that the oil meets the definition of distillate oil as defined in 40 CFR 60.41b by complying with the requirements of Conditions 7, 8, 18, and 202.a.i.
 - 201.d. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of EU-150B, the Package Boiler; any malfunction of the air pollution control equipment; of any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]
 - 201.e. The permittee shall provide records retention of five (5) years as per Conditions 193 and 194.
 - 201.f. The permittee shall send the reports required by 40 CFR 60.49b(h) to the authorities identified in Condition 206.
 - 201.g. The permittee shall report the following information within 30 days of the end of each calendar 6-month period to the LRAPA office, or alternatively to streamline the reporting deadlines, the permittee shall report the following information within 45 days of the end of each calendar 6-month period with the Title V semi-annual and annual reports at the reporting deadlines in Conditions 198 (August 15) and 198 (March 15): [40 CFR 60.49b(h)]
 - 201.g.i. Excess emission reports for EU-150B. If there are no excess emissions during the calendar quarter, the permittee shall submit a report semi-annually stating that no excess emissions occurred during the semi-annual reporting period.
202. The annual monitoring report required by Condition 198.b shall consist of:
- 202.a. Specific annual reporting requirements: [LRAPA 35-0160 and OAR 340-218-0050(3)]
 - 202.a.i. Fuel sulfur analyses certificates or analysis results for #1, #2, ASTM Grade No. 4 and/or No. 6 oil, and used oil;
 - 202.a.ii. Annual pulp production (ADMT or ADT) through EU-445A and EU-445C;
 - 202.a.iii. Mass of dry black liquor solids burned in EU-445A and EU-445C;
 - 202.a.iv. Annual amounts and types of each fuel combusted during each day in EU-445A and EU-445C;
 - 202.a.v. Annual equivalent pulp production for EU-455;
 - 202.a.vi. Annual records of the amounts of each fuel combusted in EU-455;
 - 202.a.vii. Annual records of fuel usage for emissions units EU-150A and EU-150B, and the percent of heat input provided by oil per calendar year;
 - 202.a.viii. Annual records of fuel usage for EU-402;
 - 202.a.ix. Annual records of pulp production through EU-410 and EU-420 (digesters);

- 202.a.x. Annual records of alternative fiber production through EU-402;;
- 202.a.xi. Annual records of days of operation for EU-410 and EU-420;
- 202.a.xii. Annual records of fines and hogged fuel handled through EU-802;
- 202.a.xiii. Annual records of chips handled through EU-310 based on pulp throughput;
- 202.a.xiv. Annual records of chips handled and stored through EU-320 based on pulp throughput;
- 202.a.xv. Annual records of paper production for EU-714A, EU-714B, EU-715A and EU-715B;
- 202.a.xvi. Annual records of days of operation for EU-600, EU-714A and EU-715A; and
- 202.a.xvii. Annual records of OCC production for EU-600;
- 202.b. Emission fee report (which shall be submitted within 90 days of receiving the forms from LRAPA); [OAR 340 Division 220]
- 202.c. Excess emissions upset log (excluding incidents that the permittee has already reported as allowable under Title 36 in the monthly reports); [LRAPA 36-025]
- 202.d. Second semi-annual compliance certification, covering the period from July 1 to December 31; [OAR 340-218-0080] and
- 202.e. The annual report shall also include annual greenhouse gas (GHG) emissions in accordance with OAR 340 Division 215. [OAR 340-215-0010(2) and 340-215-0040]
- 203. Other reporting requirements stated elsewhere in this permit include the following: [LRAPA 35-0160 and OAR 340-218-0050(3)]
 - 203.a. Source test plans for each emissions unit and pollutant to be tested and requested revisions to the source test plan, thereafter; and
 - 203.b. Emission factor verification testing summaries as required by Conditions 83.e, 98.e, 141.e, 159.d, 187.f, and 186.
- 204. Greenhouse Gas Registration and Reporting: If the calendar year emission rate of greenhouse gases (CO₂e) is greater than or equal to 2,756 tons (2,500 metric tons), the permittee must register and report its greenhouse gas emissions with DEQ in accordance with OAR 340-215. The greenhouse gas report must be certified by the responsible official consistent with OAR 340-218-0040(5).
- 205. The permittee shall include with all documents required by this permit, a certification by a responsible official of truth accuracy, and completeness. This certification and any other certification required under OAR 340 Division 218, shall state that, based on the information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [OAR 340-218-0040(5)]
- 206. Addresses of regulatory agencies are the following, unless otherwise instructed:

LRAPA 1010 Main Street Springfield, OR 97477 (541) 736-1056	Air Operating Permits US Environmental Protection Agency Mail Stop AWT-107 1200 Sixth Avenue Seattle, WA 98101 (206) 553-4273
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207. **REGIONAL HAZE-RELATED, BEST AVAILABLE RETROFIT TECHNOLOGY (BART)- AVOIDANCE REQUIREMENTS** **Applicable Requirement** The permittee shall maintain visibility impacts from all Best Available Retrofit Technology (BART) Eligible Emission Units (BEEU's) below 0.5 deciview (dv) for each 24-hour block period. [40 CFR Part 51.308(e)]

207.a. The BEEU's include the following:

- 207.a.i. Power Boiler, EU-150A
- 207.a.ii. No. 3 Recovery Furnace (EU-445A)
- 207.a.iii. No. 3 Recovery Furnace Smelt Dissolving Tank Vents (EU-445B)
- 207.a.iv. No. 4 Recovery Furnace (EU-445-C)
- 207.a.v. No. 4 Recovery Furnace Smelt Dissolving Tank (EU-445-D)
- 207.a.vi. Lime Kilns (EU-455)

207.b. The permittee shall demonstrate that visibility impacts from the BEEUs are below 0.5 dv by demonstrating compliance with the following equation on a daily basis:

$$E_{SO_2} + 1.46 \times E_{NO_x} \leq 500$$

Where:

- E_{SO_2} = Daily average (DE) SO_2 emission (lb/hr daily average).
- E_{NO_x} = Daily average (DE) NO_x emission rate (lb/hr daily average).
- \leq = "less than or equal to"

207.b.i. Daily average emission rates for the BEEU's and Package Boiler without continuous emission monitors (without CEMs) to be calculated as follows:

$$DE = \sum (P \times EF) / 24$$

Where:

- DE = Daily average emissions rate (lb/hr)
- \sum = Symbol representing "summation of"
- P = Daily monitoring parameter listed in Condition 186 of this permit for each BEEU's and the Package Boiler (MMBtu/day, lb/lb BLS, or lb/ADT equiv pulp)
- EF = Emission factor listed in Condition 186 of this permit

207.b.ii. Daily average emission rates for the BEEU's and the Package Boiler with continuous emission monitors (with CEMs) to be calculated as follows:

$$DE = \sum (M) / 24$$

Where:

- DE = Daily average emission rate (lb/hr)
- \sum = Symbol representing "summation of"
- M = Hourly emission rate as reported by CEM

207.c. The permittee shall include with any application to modify the mill in a manner that will increase one or more BEEU's capacity to emit NO_x and SO_2 either an updated Regional Haze impact analysis demonstrating that the BEEU impacts remain below 0.5 dv or a BART analysis for the affected BEEU(s). This condition does not apply to any BEEU that has undergone or is subject to major new source review (NSR) for the pollutant(s) whose capacity to emit is proposed to be increased.

207.d. Condition 207 shall cease to apply in the event EPA disapproves the portion of the Oregon Regional Haze State Implementation Plan in which this condition is included. Likewise, a BEEU

identified in Condition 207.a shall no longer be subject to this condition effective the day a permit is issued subjecting that emission unit to major NSR for NO_x and SO₂.

- 207.e. Condition 207.b does not apply during periods of natural gas curtailment caused by sudden and unforeseeable events including, but not limited to, declared power emergencies where natural gas is not available, acts of nature, (including fire, flood, earthquake, storm, hurricane or other natural disasters), or any other condition beyond the control of the permittee. An emergency does not include onsite conditions, noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. The permittee must alert LRAPA no later than the next operating day after the limit in Condition 207.b is exceeded during emergency periods and document in writing that reasonable measures were taken to minimize emissions. A follow-up report must be submitted to LRAPA no later than 15 days after the end of the natural gas curtailment or emergency period identifying those days where the use of fuel oil caused an exceedance of the limit in Condition 207.b and identifying the reasonable measures taken to minimize emissions.
- 207.f. This federally enforceable permit limit identified in this permit satisfies section 40 CFR51.308(e)(1) of the Regional Haze Rule, and is consistent with Appendix Y to 40 CFR Part 51 – Guidelines for Best Available Retrofit Technology (BART) Determinations Under the Regional Haze Rule. LRAPA has determined that this permit limit will prevent the BART-eligible emission units from causing or contributing to any impairment over the visibility threshold of 0.5 deciviews, in any mandatory Class I Federal Area. As a result, the permittee is not subject to BART for those BART-eligible emission units.
208. **Monitoring Requirement:** Except as provided below, the permittee shall monitor all emissions pertaining to Condition 207 by conducting monitoring in accordance with the procedures, test methods and frequencies specified in Condition 186 of this permit. [OAR 340-218-0050 (3)]
- 208.a. The permittee shall track rolling daily average NO_x and SO₂ emissions in accordance with the equation in Condition 207. The permittee shall track hourly NO_x and SO₂ emissions consistent with Condition 208.b to assure compliance with the limit in Condition 207.b. [LRAPA 32-007-1.B]
- 208.b. The permittee shall install and operate an alarm to alert the operators if the hourly combined NO_x and SO₂ emissions exceed the block 24-hour limit in Condition 207.b. Exceeding the limit on an hourly basis, by itself, is not a violation of this permit. [LRAPA 32-007-2.D]
- 208.c. The discrete daily average limit in Condition 207.b shall be based upon a 24-hour mill day of 7:30 AM one day to 7:29AM the next.
- 208.d. The permittee shall submit and follow an LRAPA-approved plan for scheduled maintenance consistent with LRAPA 36-015 (Scheduled Maintenance Plan) addressing the operation of the BEEUs anytime the No.4 Recovery Furnace is shut down for maintenance. The Scheduled Maintenance Plan will include, at a minimum, a requirement that the facility not burn No.6 Fuel Oil in the Power Boiler when the No.3 Recovery Furnace is operating; however no plan is required if the Power Boiler is not burning No. 6 Fuel Oil and No. 3 is not operating. The Scheduled Maintenance Plan is required to be submitted to LRAPA for approval at least 72 hours prior to any scheduled No. 4 Recovery Furnace maintenance event. [LRAPA 36-015]
209. **Reporting Requirement** [OAR 340-218-0050(3)]:
- 209.a. The permittee shall report any exceedance of the limit specified in Condition 207 in accordance with the excess emissions requirements in Condition 195.
- 209.b. The permittee shall include the discrete 24-hour averages in the monthly report as required by Condition 197.

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GENERAL CONDITIONS

G1. General Provision

Terms not otherwise defined in this permit have the meaning assigned to such terms in the referenced regulation.

G2. Reference Materials

Where referenced in this permit, the versions of the following materials are effective as of the dates noted unless otherwise specified in this permit:

- a. *Source Sampling Manual*; January 23, 1992 - State Implementation Plan Volume 3, Appendix A4;
- b. *Continuous Monitoring Manual*; January 23, 1992 - State Implementation Plan Volume 3, Appendix A6; and
- c. All state and federal regulations as in effect on the date of issuance of this permit.

G3. Compliance [OAR 340-218-0040(3)(n)(C), 340-218-0050(6), and 340-218-0080(4)]

- a. The permittee must comply with all conditions of this permit. Any permit condition noncompliance constitutes a violation of the Federal Clean Air Act and/or state rules and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application. Any noncompliance with a permit condition specifically designated as enforceable only by the state constitutes a violation of state rules only and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
- b. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of permit issuance is supplemental to, and does not sanction noncompliance with the applicable requirements on which it is based.
- c. For applicable requirements that will become effective during the permit term, the source must meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.

G4. Masking Emissions:

The permittee must not install or use any device or other means designed to mask the emission of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement. [LRAPA 49-040]

G5. Credible Evidence:

Notwithstanding any other provisions contained in any applicable requirement, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any such applicable requirements. [OAR 340-214-0120]

G6. Certification [LRAPA 34-015, 340-218-0040(5), 340-218-0050(3)(c)(D), and 340-218-0080(2)]

Any document submitted to LRAPA or EPA pursuant to this permit must contain certification by a responsible official of truth, accuracy and completeness. All certifications must state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and, complete. The permittee must promptly, upon discovery, report to LRAPA a material error or omission in these records, reports, plans, or other documents.

G7. Open Burning [LRAPA Title 47]

The permittee is prohibited from conducting open burning, except as may be allowed by LRAPA Title 47.

G8. Asbestos [40 CFR Part 61, Subpart M (federally enforceable) and LRAPA Title 43(LRAPA-only enforceable)]

The permittee must comply with LRAPA Title 43, and 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.

G9. Stratospheric Ozone and Climate Protection [40 CFR 82 Subpart F, OAR 340-260-0040]

The permittee must comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

G10. Permit Shield [OAR 340-218-0110]

- a. Compliance with the conditions of the permit is deemed compliance with any applicable requirements as of the date of permit issuance provided that:
 - i. such applicable requirements are included and are specifically identified in the permit, or
 - ii. LRAPA, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- b. Nothing in this rule or in any federal operating permit alters or affects the following:
 - i. the provisions of ORS 468.115 (enforcement in cases of emergency) and ORS 468.035 (function of department);
 - ii. the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - iii. the applicable requirements of the national acid rain program, consistent with section 408(a) of the FCAA; or
 - iv. the ability of LRAPA to obtain information from a source pursuant to ORS 468.095 (investigatory authority, entry on premises, status of records).
- c. Sources are not shielded from applicable requirements that are enacted during the permit term, unless such applicable requirements are incorporated into the permit by administrative amendment, as provided in OAR 340-218-0150(1)(h), significant permit modification, or reopening for cause by LRAPA

G11. Inspection and Entry [OAR 340-218-0080(3)]

Upon presentation of credentials and other documents as may be required by law, the permittee must allow the LRAPA, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), to perform the following:

- a. enter upon the permittee's premises where an Oregon Title V Operating Permit program source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- b. have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;
- c. inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. as authorized by the FCAA or state rules, sample or monitor, at reasonable times, substances or parameters, for the purposes of assuring compliance with the permit or applicable requirements.

G12. Fee Payment [OAR 340-220-0010, and 340-220-0030 through 340-220-0190]

The permittee must pay an annual base fee and an annual emission fee for all regulated air pollutants except for carbon monoxide, any class I or class II substance subject to a standard promulgated under or established by Title VI of the Federal Clean Air Act, or any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under Section 112(r) of the Federal Clean Air Act. The permittee must submit payment to the LRAPA, 1010 Main Street, Springfield, Oregon 97477, within 30 days of the date LRAPA mails the fee invoice or August 1 of the year following the calendar year for which emission fees are paid, whichever is later. Disputes must be submitted in writing to LRAPA. Payment must be made regardless of the dispute. User-based fees will be charged for specific activities (e.g., computer modeling review, ambient monitoring review, etc.) requested by the permittee.

G13. Off-Permit Changes to the Source [OAR 340-218-0140(2)]

- a. The permittee must monitor for, and record, any off-permit change to the source that:
 - i. is not addressed or prohibited by the permit;
 - ii. is not a Title I modification;
 - iii. is not subject to any requirements under Title IV of the FCAA;
 - iv. meets all applicable requirements;
 - v. does not violate any existing permit term or condition; and
 - vi. may result in emissions of regulated air pollutants subject to an applicable requirement but not otherwise regulated under this permit or may result in insignificant changes as defined in OAR 340-200-0020.
- b. A contemporaneous notification, if required under OAR 340-218-0140(2)(b), must be submitted to LRAPA and the EPA.
- c. The permittee must keep a record describing off-permit changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.
- d. The permit shield of Condition G10 does not extend to off-permit changes.

G14. Section 502(b)(10) Changes to the Source [OAR 340-218-0140(3)]

- a. The permittee must monitor for, and record, any Section 502(b)(10) change to the source, which is defined as a change that would contravene an express permit term but would not:
 - i. violate an applicable requirement;
 - ii. contravene a federally enforceable permit term or condition that is a monitoring, recordkeeping, reporting, or compliance certification requirement; or
 - iii. be a Title I modification.
- b. A minimum 7-day advance notification must be submitted to LRAPA and the EPA in accordance with OAR 340-218-0140(3)(b).
- c. The permit shield of Condition G10 does not extend to Section 502(b)(10) changes.

G15. Administrative Amendment [OAR 340-218-0150]

Administrative amendments to this permit must be requested and granted in accordance with OAR 340-218-0150. The permittee must promptly submit an application for the following types of administrative amendments upon becoming aware of the need for one, but no later than 60 days of such event:

- a. legal change of the registered name of the company with the Corporations Division of the State of Oregon, or
- b. sale or exchange of the activity or facility.

G16. Minor Permit Modification [OAR 340-218-0170]

The permittee must submit an application for a minor permit modification in accordance with OAR 340-218-0170.

G17. Significant Permit Modification [OAR 340-218-0180]

The permittee must submit an application for a significant permit modification in accordance with OAR 340-218-0180

G18. Staying Permit Conditions [OAR 340-218-0050(6)(c)]

Notwithstanding Conditions G16 and G17, the filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G19. Construction/Operation Modification [OAR 340-218-0190]

The permittee must obtain approval from LRAPA prior to construction or modification of any stationary source or air pollution control equipment in accordance with LRAPA Title 34.

G20. New Source Review Modification [LRAPA 38-0010]

The permittee may not begin construction of a major source or a major modification of any stationary source without having received an air contaminant discharge permit (ACDP) from LRAPA and having satisfied the requirements of LRAPA Title 38.

G21. Need to Halt or Reduce Activity Not a Defense [OAR 340-218-0050(6)(b)]

The need to halt or reduce activity will not be a defense. It will not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

G22. Duty to Provide Information [OAR 340-218-0050(6)(e) and LRAPA 34-015]

The permittee must furnish to LRAPA, within a reasonable time, any information that LRAPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee must also furnish to LRAPA copies of records required to be retained by the permit or, for information claimed to be confidential, the permittee may furnish such records to LRAPA along with a claim of confidentiality.

G23. Reopening for Cause [OAR 340-218-0050(6)(c) and 340-218-0200]

- a. The permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by LRAPA.
- b. A permit must be reopened and revised under any of the circumstances listed in OAR 340-218-0200(1)(a).
- c. Proceedings to reopen and reissue a permit must follow the same procedures as apply to initial permit issuance and affect only those parts of the permit for which cause to reopen exists.

G24. Severability Clause [OAR 340-218-0050(5)]

Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, recordkeeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with.

G25. Permit Renewal and Expiration [OAR 340-218-0040(1)(a)(D) and 340-218-0130]

- a. This permit expires at the end of its term, unless a timely and complete renewal application is submitted as described below. Permit expiration terminates the permittee's right to operate.
- b. Applications for renewal must be submitted at least 12 months before the expiration of this permit, unless LRAPA requests an earlier submittal. If more than 12 months is required to process a permit renewal application, LRAPA must provide no less than six (6) months for the owner or operator to prepare an application.
- c. Provided the permittee submits a timely and complete renewal application, this permit will remain in effect until final action has been taken on the renewal application to issue or deny the permit.

G26. Permit Transference [OAR 340-218-0150(1)(d)]

The permit is not transferable to any person except as provided in OAR 340-218-0150(1)(d).

G27. Property Rights [OAR 340-218-0050(6)(d)]

The permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations, except as provided in OAR 340-218-0110.

G28. Permit Availability [OAR 340-218-0120(2)]

The permittee must have available at the facility at all times a copy of the LRAPA Title V Operating Permit and must provide a copy of the permit to LRAPA or an authorized representative upon request.

ALL INQUIRIES SHOULD BE DIRECTED TO:

Lane Regional Air Protection Agency
1010 Main Street
Springfield, OR 97477
(541) 736-1056